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THE BULLETIN OF ZOOLOGICAL NOMENCLATURE

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VOLUME 24

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NOTICES

(a) *Date of Commencement of Voting.*—In normal circumstances the Commission starts to vote on applications published in the *Bulletin of Zoological Nomenclature* six months after the publication of each application. Any zoologist who wishes to comment on any of the applications in the present part is invited to send his contribution, in duplicate, to the Secretariat of the Commission as quickly as possible, and in any case in time to reach the Secretariat before the close of the six-month period.

(b) *Possible use of the Plenary Powers.*—The possible use by the Commission of its plenary powers is involved in the following applications published in the present part of the *Bulletin:*

(1) Validation of *Bugula* and *Scruparia* from Oken, 1815 (Polyzoa). Z.N.(S.) 1390.
(2) Grant of availability for certain "section" names of de Saussure (Hymenoptera). Z.N.(S.) 1689.
(3) Suppression of *Strix capensis* Daudin, 1800 (Aves). Z.N.(S.) 1692.
(4) Validation of *Ophiura* Lamarck, 1801, with suppression of ten specific names (Ophiuroidea). Z.N.(S.) 1772.
(5) Designation of a neotype for *Gorgonia flabelliforme* Eichwald, 1840 (Graptolithina). Z.N.(S.) 1776.
(6) Suppression of *Voluta citrina*, *Voluta strigosa* and *Voluta leucostoma* Gmelin, 1791 (Gastropoda). Z.N.(S.) 1777.
(7) Validation of *Dicerorhinus* Gloger, 1841 (Mammalia). Z.N.(S.) 1779.
(8) Validation of *Tetrameres* Creplin, 1846 (Nematoda). Z.N.(S.) 1783.
(9) Validation of *Sterna tschegrava* Lepechin and *Motacilla pleschenka* Lepechin, "1770" (Aves). Z.N.(S.) 1784.
(10) Validation of emendation to *Polyxenus* of *Pollyxenus* Latreille, [1802–1803] (Diplopoda). Z.N.(S.) 1785.

c/o British Museum (Natural History),
Cromwell Road,
London, S.W.7, England.
February 1967.

W. E. CHINA
Assistant Secretary
International Commission on
Zoological Nomenclature

COMMENT ON THE GENDER OF NAMES ENDING IN *-OPS*. Z.N.(S.) 1572

By Afrânio do Amaral (*Instituto Butantan, S. Paulo, Brazil*)

In a recent note (*Bull. zool. Nomencl.* **23** : 75) on this question Wolk and Eisenmann called to the Commission's attention the case of the avian genus *Rynchops* (sic) which Linnaeus scholarly treated as feminine (*R. nigra*).

It is regrettable that their note indirectly revives one of the inadvertent errors that have crept into the *Systema Naturae*, 1758.

Unmindful of the fact that the genus name Linnaeus applied to the skimmers was twice and variously misspelt in that publication as *Rhyncops* (p. 84) and *Rynchops* (p. 138), Th. Pennant (in *Genera of Birds*, 1781) went so far as to fancifully state that the second element of that compound derived from the Greek *koptein*, thus leaving the first element as *Rhyn-* (or *Ryn-* in the second error). However and inasmuch as the stem involved is not *Rhyn-* (or *Ryn-*) but *Rhynch-*, should Pennant's statement be analysed in the light of the linguistic principles as synthesized in Art. 29a and Art. 29c of the International Code, it would lead to the formation of the meaningless monster *Rhynchocops*.

Fortunately, both of those misspellings were corrected in due time, in the Errata of the *Systema Naturae* (as iterated, in 1894, in its Appendix, p. 1), to *Rhynchops*, thus confirming Linnaeus' natural acumen and academic foundation.

Concerning their suggestion for an exception to be included in the Rules for certain cases, I am unable to conceive how it could contribute to stability and universality in Nomenclature, the promotion of which is the very object of the International Code.

COMMENT ON COLLETTE AND BERRY'S PROPOSALS CONCERNING THE NOMENCLATURE OF BELONIDAE (FISHES). Z.N.(S.) 1723

(see volume 22, pages 325–329)

By Enrico Tortonese (*Museum of Natural History, Genoa, Italy*)

B. B. Collette and F. H. Berry proposed that the name *imperialis* be suppressed for a species of BELONIDAE living in the Mediterranean and in the tropical Atlantic. Accordingly, the name *Tylosurus acus* would be used for such a fish. Both the descriptions of *Sphyraena acus* Lacépède (1803) and *Esox imperialis* Rafinesque (1810) are obviously poor. However, we cannot doubt the identity of the species observed by Rafinesque near Sicily; the name *imperialis* was therefore used by many students of the Mediterranean fishes (Moreau, 1881; Vinciguerra, 1885; Carus, 1893; D'Acona, 1931; Tortonese, 1963) and by G. F. Mees in his revision of the Belonidae (*Zool. Verhandel.*, Leiden, No. 54, 1962).

According to Collette and Berry we cannot be sure of the identity of *imperialis* because " two " species of *Tylosurus* are presently known to exist in the Mediterranean. Actually, one only has been found in all basins and is present in the seas surrounding Sicily. The other—*T. crocodilus* (Pér. Le Sueur)—has only recently been noticed in the Eastern Mediterranean and is one of the fishes which has immigrated from the Red Sea through the Suez Canal—C. George (*Amer. Univ. Beirut, Misc. Pap. Nat. Sci.*, No. 4, 1964, p. 14)—and first captured along the shores of Lebanon.

Being sure, therefore, that Rafinesque had just the species that was often named *acus*, chiefly by the American ichthyologists, it seems necessary to drop the latter name and keep *imperialis* as the proper name for this species.

COMMENT ON THE PROPOSAL FOR THE CONSERVATION OF *PANTHERA* AND *PAN*. Z.N.(S.) 482

(see volume 22, pages 230–232)

By E. Tortonese (*Museum of Natural History, Genoa, Italy*)

When I read Morrison-Scott's proposal for the conservation of the names *Pan* and *Panthera*, I sent a few words of support, as it seemed advisable to keep such names, now widely employed by both mammalogists and non-mammalogists.

Now, I am rather impressed by comments sent by P. Hershkovitz and by F. Dias de Avila-Prires (*Bull. zool. Nomencl.* **23** (2/3) : 67–69). It appears that we must first consider not a nomenclatorial problem, but a strictly taxonomic one: are large and small cats congeneric or not? are chimpanzee and gorilla congeneric or not?

It is often said that the taxonomy of mammals is now well established and that only the smaller forms require further work. It is therefore surprising that we don't know the proper scientific name of the lion, or the chimpanzee; as a matter of fact a museum curator or director is still uncertain (1966!) about the labelling of the specimens, and the present examples are not alone.

Therefore, I consider the opportunity of discussing a nomenclatorial question a doubtful one when the corresponding taxonomic question has not been solved.

May I add that, as far as large mammals are concerned, the solution of similar problems is particularly desirable. The present case involves such " well-known " animals that a final agreement on their taxonomy can reasonably be expected. Of course, this is a matter for the mammalogists and not for the Commission. The latter can consider later what generic names are to be used, if this remains uncertain.

INTERNATIONAL TRUST FOR ZOOLOGICAL NOMENCLATURE

The finances of the Trust for 1965 show an improvement over the figures for 1964. There is an excess of income over expenditure of £660 compared with an excess of expenditure over income of £870 a true improvement of £1,500 in the year's working.

This result is due to several factors of which the following may be mentioned: Sales of Publications benefited by £400 from the sale of back sets, and Investment Income is £100 more than last year.

On the expenditure side administrative costs have not been allowed to rise and the printing bill is less by £400 for the Bulletin. Non-recurrent expenditure in 1964 of nearly £900 for the Code also did not occur this year.

Sales of the Bulletin, the main source of revenue to the Trust, remain constant and it seems that there is now little scope for a substantial increase in the number of subscribers.

The "Official List" suspense account has been quiescent during 1965, but substantial progress has been made with several 'Lists' for publication next year. Since there is adequate revenue to meet the cost no account has been taken in the Account for 1965.

INTERNATIONAL TRUST FOR

Incorporated under the Companies

BALANCE SHEET—

1964 £	£		£ s. d.	£ s. d.
		Revenue Reserves—		
10,000		General Reserve	10,000 0 0	
3,211		"Official List" Suspense Account (per separate account)	3,283 16 8	
3,439		Income and Expenditure Account (per separate account)	4,098 10 6	
16,650				17,382 7 2
		Special Donation unappropriated—		
252		Balance at 31st December, 1964		252 2 3
		Current Liabilities—		
911		Sundry Creditors	1,029 8 3	
340		Subscriptions to Publications received in advance ..	141 6 6	
1,251				1,170 14 9
£18,153				£18,805 4

REPORT C

We have obtained the information and explanations which we considered necessary, and in our opinion

(1) The above balance sheet and annexed income and expenditure account gives a true and fair view of t ended on that date.

(2) Proper books have been kept and the accounts are in agreement therewith and give, in the prescrib

FINSBURY CIRCUS HOUSE,
BLOMFIELD STREET,
LONDON, E.C.2.
15th March, 1966

ZOOLOGICAL NOMENCLATURE

Act, 1929 (Limited by Guarantee)

31st December, 1965

1964 £	£		£ s. d.	£ s. d.
		Fixed Assets—		
		Office Equipment—		
	877	Book value at 1st July, 1948 and additions since at cost	877 10 6	
341	*536*	*Less* Depreciation and amount written off	570 10 6	307 0 0
		Investments at cost—		
	2,079	£2,500 2½% Savings Bonds 1964/67	2,078 10 6	
	2,249	£2,500 3% Savings Bonds 1955/65..	— — —	
	5,689	£6,857 2s 11*d* British Transport 3% Stock 1968/73 ..	5,689 6 8	
	—	£2,500 6½% Exchequer Stock 1969	2,248 16 9	
	10,017	(£10,199) (Market value at date £10,700)	10,016 13 11	
	3,000	County Borough of Preston Temporary Loan	3,000 0 0	
13,017				13,016 13 11
		Current Assets—		
	£	Amounts due for Publications at £ s. d.		
	300	valuation 90 0 0		
	78	Income Tax Recoverable .. 38 13 5		
	378		128 13 5	
	4,417	Balances at Bank and Cash in Hand.. ..	5,352 16 10	
4,795				5,481 10 3
		(NOTE—The Stock of Publications has not been valued)		

FRANCIS J. GRIFFIN, N. D. RILEY } Members of the Committee of Management

£18,153	£18,805 4 2

THE AUDITORS

state of the Trust's affairs at 31st December, 1965 and of the excess of income over expenditure for the year
manner, the information required by the Companies Act, 1948.

W. B. KEEN & CO.,
Chartered Accountants

Income and Expenditure Account for

1964		EXPENDITURE				
£	£		£	s.	d.	£ s. d.
		Administration Expenses—				
3,668		Salaries, National Insurance etc.	3,670	16	2	
757		Office Expenses	848	7	11	
53		Audit Fee	52	10	0	
4,478			4,571	14	1	
50		*Less* Proportion allocated to "Official List"	50	0	0	
4,428						4,521 14 1
38		Depreciation of Office Equipment				34 0 0
		Printing and Distribution of Publications—				
880		International Code	—	—	—	
2,405		Bulletin of Zoological Nomenclature	1,988	3	6	
3,285						1,988 3 6
7,751						6,543 17 7
—		Balance, being Excess of Income over Expenditure for the year, carried down				659 17 5
£7,751						£7,203 15 0
871		Balance brought down				— — —
3,439		Balance carried forward to Balance Sheet				4,098 10 6
£4,310						£4,098 10 6

"Official List"

for the year ende

1964			
£			£ s. d
50		Proportion of Administration Expenses	50 0
3,211		Balance carried forward to Balance Sheet	3,283 16
£3,261			£3,333 16

the year ended 31st December, 1965

1964 £	£	INCOME	£ s. d.	£ s. d.
		Sales of Publications—		
916		International Code	762 4 7	
82		Opinions and Declarations	651 8 8	
5,084		Bulletin of Zoological Nomenclature	5,040 17 8	
—		Copenhagen Decisions on Zoological Nomenclature ..	2 7 6	
6,082				6,456 18 5
14		Donations		13 17 11
435		Interest Received on Investments (gross)		533 8 4
169		Interest on Bank Deposit		199 10 4
180		Grant from U.N.E.S.C.O. per International Union of Biological Sciences		— — —
6,880				7,203 15 0
871		Balance, being Excess of Expenditure over Income for the year, carried down		— — —
£7,751				£7,203 15 0
4,310		Balance brought forward from 1964		3,438 13 1
—		Balance brought down		659 17 5
£4,310				£4,098 10 6

Suspense Account

31st December, 1965

1964 £		£ s. d.
3,080	Balance brought forward from 1964	3,210 19 1
181	Sales of Publications	122 17 7
£3,261		£3,333 16 8

COMMENTS ON THE PROPOSED SUPPRESSION OF *AMPHISBAENA MILDEI* PETERS, 1878. Z.N.(S.) 1746

(see volume 23, pages 162–163)

By Hobart M. Smith (*Department of Zoology and Museum of Natural History, University of Illinois, Urbana, Illinois, U.S.A.*)

The data presented by Gans on the history of the name *Amphisbaena mildei* Peters leave no question that the best interests of stability of nomenclature, in reference both the past events and possible future developments, are served by suppression of Peter's name. This specific proposal (8a, c, p. 163) has my strong endorsement.

However, in reference to the proposed entry of *Amphisbaena trachura* Cope, 1885, on the Official List, it should be pointed out that the security of *trachura* is, according to data given by Gans, assured by elimination of *mildei* Peters. If additional effort to assure nomenclatural stability is expended for this group it more appropriately should be directed toward conservation of the most nomenclaturally important names—in this case presumably *Amphisbaena darwini* Duméril and Bibron, 1839. The " Official List " of 1958 (pp. vii–viii) deals with some of the hazards of conservation of subspecific names and directs that where any species-group name proposed for conservation is applicable to a paranominate subspecies, " there should at the same time be placed on the Official List the specific name of the species of which, in the opinion of some specialists, the taxon bearing the other name should be regarded as being a subspecies ".

Accordingly I strongly urge that either *trachura* not be added to the Official List, or that the name *Amphisbaena darwini* Duméril and Bibron, 1839, be simultaneously added.

Although the introduction to the 1958 Official List of Specific Names clarifies a number of questions, it does not make clearly evident whether a conserved species-group name is ever to be regarded *ipso facto* as having nomenclatural priority over earlier conspecific name applied to other subspecies of the same species. Automatic priority carries the penalty of replacement of older names for the species, where applied to a different subspecies, or where a worker refuses to recognize subspecies. Absence of priority carries the penalty of permitting conserved names to exist as junior synonyms of older names. The relative status of two or more conserved names, conspecific but not consubspecific, remains to be clarified.

By H. Wermuth (*Staatliches Museum für Naturkunde in Stuttgart, Germany*)

As former curator of herpetology at the Zoological Museum of Berlin I wish to verify that the type specimen of *A. mildei* has been separated from its label by an accident and that it got among other amphisbaenid material. In consequence of this fact, there seems to be very poor prospect of its reidentification. Considering these circumstances and the others noted by Gans, I urgently ask the Commission to grant the request of Dr. Gans and to place the name *Amphisbaena mildei* Peters, 1878, on the Official Index of Rejected and Invalid specific Names in Zoology.

AMENDMENT TO APPLICATION FOR THE SUPPRESSION OF *AMPHISBAENA MILDEI* PETERS, 1878

By Carl Gans (*State University of New York at Buffalo, New York* 14214, *U.S.A.*)

In view of the circumstances adduced by Dr. Smith, and also of the admittedly incomplete status of our knowledge of these uncommonly collected animals, I would urge that the name *Amphisbaena trachura* not be added to the Official List.

COMMENT ON THE PROPOSED VALIDATION OF *VOLUTA EPISCOPALIS* LINNAEUS, 1758. Z.N.(S.) 1728

(see volume 22, pages 355–356, volume 23, pages 80–81)

By Myra Keen (*Department of Geology, Stanford University, California* 94305, *U.S.A.*)

Although the selection of *Mitra episcopalis* in preference to *Mitra mitra* Linnaeus would be congruent with a number of other I.C.Z.N. decisions (e.g., *Modiolus* Lamarck, 1799, vs. *Volsella* Scopoli, 1777, and *Turbinella* Lamarck, 1799 vs. *Xancus* Röding, 1798), in which preponderant 19th century usage was a deciding factor, I have the impression that Coan (*Bull. zool. Nomencl.* **22** : 355–6) in presenting some alternatives, was more concerned with getting a judicial opinion than in arguing the merits of either choice.

Heppell (*Bull. zool. Nomencl.* **23** : 81) has alluded to a correlative problem, the supposed priority of the generic name *Mitra* Röding over *Mitra* Lamarck. Coan has discussed this in a paper subsequent to his petition (Coan, 1966, *Veliger* **9** (2) : 130, footnote). The exact date and also the authorship of the nominal taxon *Mitra* therefore should be clarified. Cernohorsky (1965, *Veliger* **8** (2) : 81, 159) would give priority to *Mitra* Röding on the basis of a date (September 10, 1798) in the introduction to the " Museum Boltenianum ", a sale catalogue. It seems generally agreed that *Mitra* Lamarck dates from September 21, 1798, the last day of the year " VI " of the French Republic, under Article 21 (b) (ii) of the International Code. It seems to me that this principle should also apply to the Röding work, dating it from December 31, 1798. There is no date on the title page of the " Museum Boltenianum ", and the date " September 10, 1798 " appears only in a preface or introduction prepared by a Professor Lichtenstein, who had assisted Röding in the readying of Bolten's manuscript catalogue for use in the sale of his collection. Is it not more likely that this was the date when the list was ready to send to the printer rather than the date when it became available to the public? Supporting evidence for this view can be gleaned from a paper by Rehder (*Nautilus* **59** (2) : 50–52, 1944), who has pointed out contemporary mention of the Bolten catalogue. In the issue of January 16, 1799 of the *Intelligenzblatt der Allgemeinen Literatur-Zeitung*, columns 39–40, there is a review of the work and a statement as to its preparation, that Röding and Lichtenstein had edited Bolten's catalogue and " have then had it printed ". " Amateurs outside of the city may . . . receive the list for 6 shillings." This implies a very recent appearance of the work. Rehder concludes that it probably had appeared in November or December of 1798. Invoking of Article 21 (b) (ii) would thus seem logical.

Although the part of the *Encyclopédie Méthodique* in which the name *Mitra* appeared on several plate captions (credited to Lamarck as editor) contains several other generic names, only one had not previously been validated—*Terebellum*. It, like *Mitra*, also was listed in the Museum Boltenianum. Whether dated from Röding (*Mus. Bolt.*: 135) or from Lamarck (*Encycl. Méth.*: pl. 360), the type species is the same —*Bulla terebellum* Linnaeus, 1767, by absolute tautonymy. The type species for *Mitra* also remains unchanged, whichever author is accepted, having been fixed by subsequent designation of Montfort, 1810. Thus, a decision to concede priority to the Lamarckian names would not involve change in concept of any generic name and would involve change of authorship for only the two, *Mitra* and *Terebellum*.

OPINION 800

LEPTOCORIXA BERTHOLD, 1827 (INSECTA, HEMIPTERA): SUPPRESSED UNDER THE PLENARY POWERS IN FAVOUR OF *LEPTOCORISA* LATREILLE, 1829

RULING.—(1) Under the plenary powers the generic name *Leptocorixa* Berthold, 1827, is hereby suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy.

(2) The following generic names are hereby placed on the Official List of Generic Names in Zoology, with the Name Numbers specified:

(a) *Leptocorisa* Latreille, 1829 (gender : feminine), type-species by subsequent monotypy, *Leptocorisa flavida* Guérin, 1830 (Name No. 1746);

(b) *Stenocoris* Burmeister, 1839 (gender : masculine), type-species, by monotypy, *Cimex tipuloides* De Geer, 1773 (Name No. 1747).

(3) The following specific names are hereby placed on the Official List of Specific Names in Zoology with the Name Numbers specified:

(a) *acuta* Thunberg, 1783, as published in the binomen *Cimex acuta* (Name No. 2182);

(b) *tipuloides* De Geer, 1773, as published in the binomen *Cimex tipuloides* (type-species of *Stenocoris* Burmeister, 1839) (Name No. 2183).

(4) The family-group name LEPTOCORISINI (correction of LEPTOCORISARIA) Stål, 1872 (type-genus *Leptocorisa* Latreille, 1829) is hereby placed on the Official List of Family-Group Names in Zoology with the Name Number 418.

(5) The following family-group names are hereby placed on the Official Index of Rejected and Invalid Family-Group Names in Zoology with the Name Numbers specified:

(a) LEPTOCORISARIA Stål, 1872 (type-genus *Leptocorisa* Latreille, 1829) (an incorrect original spelling for LEPTOCORISINI) (Name No. 429);

(b) LEPTOCORIXARIA Bergroth, 1913 (type-genus *Leptocorixa* Berthold, 1827) (invalid because the name of the type-genus has been suppressed under the plenary powers) (Name No. 430).

(6) The generic name *Leptocorixa* Berthold, 1827 (as suppressed under the plenary powers in (1) above) is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology with the Name Number 1896.

HISTORY OF THE CASE (Z.N.(S.) 1589)

The present case was submitted to the office of the Commission by Dr. W. E. China and Mr. Imtiaz Ahmad in January 1963. The application was sent to the printer on 17 July 1963 and was published on 6 December 1963 in *Bull. zool. Nomencl.* **20** : 435–437. Public notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184) and to seven entomological serials.

The application was supported by Dr. C. W. Schaefer (*Bull. zool. Nomencl.* **21** : 416) and Prof. T. Jaczewski (*ibid.* **22** : 335).

DECISION OF THE COMMISSION

On 3 May 1966 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (66)23 either for or against the proposal set out in *Bull. zool. Nomencl.* **20** : 436–437. At the close of the prescribed voting period on 3 August 1966 the state of the voting was as follows:

Affirmative votes—nineteen (19), received in the following order: China, Simpson, Mayr, Bonnet, Boschma, Brinck, Vokes, Jaczewski, Lemche, Uchida, Tortonese, do Amaral, Mertens, Forest, Alvarado, Munroe, Stoll, Kraus, Evans.

Negative votes—three (3): Holthuis, Sabrosky, Ride.

Voting Papers not returned—two (2): Hubbs, Obruchev.

Commissioner Binder returned a late affirmative vote.

The following comments were made by Commissioners in returning their votes:

Dr. L. B. Holthuis (11.v.66): " In the application the type-species of *Leptocorisa* is said to be *L. flavida* Guérin, 1830, being the first species to be placed in the genus. For the original description of Guérin's species you cite ' Voy. Coq., Zool. 2 : 178 ' and no plate. According to Becquaert (1916, Entom. Mitt. Berlin, vol. 15, pp. 186–195), the text of Guérin's Insects of the ' Coquille ' did not appear before 1838, so that if the name *Leptocorisa flavida* was not given by Guérin on any of the plates, which Becquaert dates from 1831, *L. flavida* is not the type of *Leptocorisa*. In that case the type would be *Cimex filiformis* and Ahmad's new genus is superfluous.

" It is not clear to me whether or not *Leptocorisa* has been used extensively for the genus containing *Cimex filiformis*. If so, a changing over of this name to the genus *Rhabdocoris* seems unfortunate.

" Also I am not convinced that it is worth while to suppress the name *Leptocorixa* Berthold. This is why a vote against the proposal as a whole."

[The reference given for *L. flavida* Guérin should have been Atlas Plate (Ins.) 12, 1831. Guérin gives the names of the figures at the foot of the plate including *L. flavida* Guérin. Thus Guérin's species antedates Laporte's designation by monotypy of *Leptocorisa linearis* Laporte (=*C. filiformis* F.), and Ahmad's genus *Oryzocoris* is still necessary. W. E. China.]

Prof. T. Jaczewski (26.v.66): " The date of the family-group name LEPTOCORISARIA Stål is not 1877, but 1872 (*Öfv. K. svensk. Vetensk.-Akad. Forhandl.* **29** : 54)."

Dr. C. W. Sabrosky (1.vii.66): " I see no compelling reasons for suppression of the valid Latin name *Leptocorixa* of Berthold, 1829. As for usage, modern usage (in this century) seems about equally divided: 7 *Leptocorisa* and 6 *Leptocorixa* in the lists cited by China and Ahmad, paragraph 2 and 5."

ORIGINAL REFERENCES

The following are the original references for names placed on Official Lists and Indexes by the Ruling given in the present Opinion:

acuta, Cimex, Thunberg, 1783, *Nov. Ins. Spec.* **2** : 34

Leptocorisa Latreille, 1829, *in* Cuvier, *Règn. Anim.* **5** : 197

LEPTOCORISARIA Stål, 1872, an incorrect original spelling for LEPTOCORISINI q.v.

LEPTOCORISINI Stål, 1872, *Öfv. K. svensk. Vetensk.-Akad. Forhandl.* **29** : 54

Leptocorixa Berthold, 1827, *in* Latreille, *Nat. Fam. Thierr.*: 418
LEPTOCORIXARIA Bergroth, 1913, *Ent. Mitteil.* **11** : 12
Stenocoris Burmeister, 1839, *Handb. Ent.* **2** : 1010
tipuloides, *Cimex*, De Geer, 1773, *Mém. Hist. Ins.* **3** : 354

CERTIFICATE

We certify that the votes cast on Voting Paper (66)23 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 800.

G. OWEN EVANS
Secretary

W. E. CHINA
Assistant Secretary

International Commission on Zoological Nomenclature
London
27 *October* 1966

OPINION 801

MOEHRING, 1758, *GESLACHTEN DER VOGELEN:* SUPPRESSED UNDER THE PLENARY POWERS

RULING.—Under the plenary powers the 1758 edition of Moehring's *Geslachten der Vogelen,* edited by Nozeman & Vosmaer and published in Amsterdam, is hereby suppressed for nomenclatorial purposes.

HISTORY OF THE CASE (Z.N.(S.) 1637)

The present case was submitted to the office of the Commission in 1958 by the Standing Committee on Ornithological Nomenclature of the International Ornithological Congress (Chairman, Finn Salomonsen). The application was sent to the printer on 8 May 1964 and was published on 26 November 1964 in *Bull. zool. Nomencl.* **21** : 368–369. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (*Bull. zool. Nomencl.* **21** : 184) and to twelve ornithological serials. No comment was received.

DECISION OF THE COMMISSION

On 15 August 1966 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (66)42 either for or against the proposal set out in *Bull. zool. Nomencl.* **21** : 369. At the close of the prescribed voting period on 15 November 1966 the state of the voting was as follows:

Affirmative votes—twenty-two (22), received in the following order: China, Vokes, Obruchev, Simpson, Holthuis, do Amaral, Mayr, Bonnet, Tortonese, Stoll, Uchida, Jaczewski, Kraus, Evans, Lemche, Mertens, Sabrosky, Binder, Brinck, Forest, Ride, Alvarado.

Negative votes—none (0).

Voting Papers not returned—three (3): Boschma, Hubbs, Munroe.

CERTIFICATE

We certify that the votes cast on Voting Paper (66)42 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 801.

G. OWEN EVANS
Secretary

W. E. CHINA
Assistant Secretary

International Commission on Zoological Nomenclature
London
23 *December* 1966

OPINION 802

LAEMOPHLOEUS IMMUNDUS REITTER, 1874 (INSECTA, COLEOPTERA): SUPPRESSED UNDER THE PLENARY POWERS

RULING.—(1) Under the plenary powers the specific name *immundus* Reitter, 1874, as published in the binomen *Laemophloeus immundus*, is hereby suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy.

(2) The specific name *immundus* Reitter, 1874, as published in the binomen *Laemophloeus immundus* (as suppressed under the plenary powers in (1) above) is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology with the Name Number 879.

(3) The specific name *turcicus* Grouvelle, 1876, as published in the binomen *Laemophloeus turcicus*, is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2184.

HISTORY OF THE CASE (Z.N.(S.) 1649)

The present case was submitted to the office of the Commission by Dr. L. P. Lefkovitch in February 1964. Dr. Lefkovitch's application was sent to the printer on 8 May 1964 and was published on 26 November 1964 in *Bull. zool. Nomencl.* **21** : 375–376. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184) and to seven entomological serials. No comment was received.

DECISION OF THE COMMISSION

On 19 September 1966 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (66)46 either for or against the proposal set out in *Bull. zool. Nomencl.* **21** : 375–376. At the close of the prescribed voting period on 19 December 1966 the state of the voting was as follows:

Affirmative votes—twenty-one (21), received in the following order: Boschma, Holthuis, Simpson, Mayr, Vokes, Obruchev, China, Bonnet, Lemche, Uchida, Jaczewski, Binder, Brinck, Tortonese, Alvarado, Ride, Stoll, Kraus, Mertens, Evans, Forest.

Negative votes—two (2): Munroe, Sabrosky.

Voting Papers not returned—two (2): do Amaral, Hubbs.

The following comments were made by Commissioners in returning their votes:

Dr. E. G. Munroe (17.xi.66): " This is a clear case in which a nomenclatorial change reflects a change in taxonomic concepts, and not mere resurrection of a bibliographically buried *nomen oblitum*. In my opinion the rules should not be suspended."

Dr. Per Brinck (2.xii.66): " In entomology there are certainly many cases like that described, particularly in little-worked families. According to the applicant the species involved is a pest and the name *turcicus* has been widely used in entomology while *immundus* has been uninterpreted until types were examined. Because of the species being a well-known pest I vote for the application, otherwise I would have felt unable to do so. There must be a serious reason for such a decision in a little-worked group."

Dr. C. W. Sabrosky (5.xii.66): " I am not impressed by any urgent need for conservation. I am more impressed by the facts (1) that there were no comments on what was claimed to be an important species, and (2) that syntypes of the Reitter species and Grouvelle material of the Grouvelle species have long existed side by side in the collection without specialists noting the identity of the two."

Original References

The following are the original references for names placed on the Official List and Index by the Ruling given in the present Opinion:

immundus, *Laemophloeus*, Reitter, 1874, *Verh. zool.-bot. Ges. Wien* **24** : 519

turcicus, *Laemophloeus*, Grouvelle, 1876, *Ann. Soc. ent. Fr.* (5) **4** : xxxii

CERTIFICATE

We certify that the votes cast on Voting Paper (66)46 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 802.

G. OWEN EVANS
Secretary

W. E. CHINA
Assistant Secretary

International Commission on Zoological Nomenclature
London
3 *January* 1967

OPINION 803

ANTHUS ROSEATUS BLYTH, 1847 (AVES): VALIDATED UNDER THE PLENARY POWERS

RULING.—(1) Under the plenary powers the specific name *pelopus* J. E. Gray, 1846, as published in the binomen *Anthus pelopus*, is hereby suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy.

(2) The specific name *pelopus* J. E. Gray, 1846, as published in the binomen *Anthus pelopus* (as suppressed under the plenary powers in (1) above) is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology with the Name Number 880.

(3) The specific name *roseatus* Blyth, 1847, as published in the binomen *Anthus roseatus*, is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2185.

HISTORY OF THE CASE (Z.N.(S.) 1654)

The present case was submitted to the office of the Commission by Dr. Finn Salomonsen and Dr. Charles Vaurie in May 1964. The application was sent to the printer on 13 July 1964 and was published on 26 November 1964 in *Bull. zool. Nomencl.* **21** : 386–387. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184) and to ten ornithological serials. No comment was received.

DECISION OF THE COMMISSION

On 19 September 1966 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (66)48 either for or against the proposals set out in *Bull. zool. Nomencl.* **21** : 386–387. At the close of the prescribed voting period on 19 December 1966 the state of the voting was as follows:

Affirmative votes—twenty-two (22), received in the following order: Boschma, Holthuis, Simpson, Mayr, Vokes, Obruchev, China, Bonnet, Lemche, Uchida, Jaczewski, Binder, Munroe, Brinck, Tortonese, Alvarado, Ride, Stoll, Kraus, Mertens, Forest, Evans.

Negative votes—one (1): Sabrosky.

Voting Papers not returned—two (2): do Amaral, Hubbs.

The following comment was made by Dr. C. W. Sabrosky in returning his vote: " I dislike to see the Commission approve, in effect, the nearly 120 years ignoring of a bird name proposed in as prominent a reference as Gray's Catalogue."

Original References

The following are the original references for names placed on the Official List and Index by the Ruling given in the present Opinion:

pelopus, *Anthus*, Gray, 1846, *Catalogue of the Specimens and Drawings of Mammalia and Birds of Nepal and Thibet presented by B. H. Hodgson Esq. to the British Museum* : 154

roseatus, *Anthus*, Blyth, 1847, *J. asiat. Soc. Bengal* **16** : 437

CERTIFICATE

We certify that the votes cast on Voting Paper (66)48 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 803.

G. OWEN EVANS
Secretary

W. E. CHINA
Assistant Secretary

International Commission on Zoological Nomenclature
London
3 *January* 1967

OPINION 804

COLUBER DOLIATUS LINNAEUS, 1766 (REPTILIA): SUPPRESSED UNDER THE PLENARY POWERS

RULING.—(1) Under the plenary powers the specific name *doliatus* Linnaeus, 1766, as published in the binomen *Coluber doliatus*, is hereby suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy.

(2) The specific name *doliatus* Linnaeus, 1766, as published in the binomen *Coluber doliatus* (as suppressed under the plenary powers in (1) above) is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology with the Name Number 881.

(3) The following specific names are hereby placed on the Official List of Specific Names in Zoology with the Name Numbers specified:

(a) *triangulum* Lacépède, 1788, as published in the binomen *Coluber triangulum* (Name No. 2186);

(b) *coccineus* Blumenbach, 1788, as published in the binomen *Coluber coccineus* (Name No. 2187).

HISTORY OF THE CASE (Z.N.(S.) 1656)

The present case was submitted to the office of the Commission by Hobart M. Smith, John D. Lynch and B. Gail Puckette in July 1964. The application was sent to the printer on 13 July 1964 and was published on 26 November 1964 in *Bull. zool. Nomencl.* **21** : 392–396. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184) and to two herpetological serials. The application was supported by L. D. Wilson and K. L. Williams.

DECISION OF THE COMMISSION

On 19 September 1966 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (66)50 either for or against the proposals set out in *Bull. zool. Nomencl.* **21** : 395. At the close of the prescribed voting period on 19 December 1966 the state of the voting was as follows:

Affirmative votes—twenty-three (23), received in the following order: Boschma, Holthuis, Simpson, Mayr, Vokes, Obruchev, China, Bonnet, Lemche, Uchida, Binder, Munroe, Brinck, Jaczewski, Sabrosky, Tortonese, Alvarado, Ride, Stoll, Kraus, Mertens, Forest, Evans.

Negative votes—none (0).

Voting Papers not returned—two (2): do Amaral, Hubbs.

In returning his voting paper Prof. Per Brinck made the following comment: " Smith, Lynch and Puckette have in a very clear way demonstrated that *Coluber doliatus* Linnaeus is *Cemophora coccinea* Blumenbach. It is evident that their decision would be accepted by anyone interested in these snakes.

Therefore, there would hardly be any more trouble as regards the applicability of the name, but it cannot be denied that it would be troublesome to have *doliatus* transferred to a genus where it has not been placed previously and in such a way that it takes the place of another specific name."

Original References

The following are the original references for names placed on the Official List and Index by the Ruling given in the present Opinion:

coccineus, *Coluber*, Blumenbach, 1788, *Magazin f.d. neuste aus d. Physik u. Naturg.* **5** (1) : 11, pl. 1

doliatus, *Coluber*, Linnaeus, 1766, *Syst. Nat.* (ed. 12) **1** : 376

triangulum, *Coluber*, Lacépède, 1788, *Hist. nat. Quad. ovip. Serpens* **2** : (table methodique) 86, 331.

CERTIFICATE

We certify that the votes cast on Voting Paper (66)50 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 804.

G. OWEN EVANS
Secretary

W. E. CHINA
Assistant Secretary

International Commission on Zoological Nomenclature
London
3 *January* 1967

OPINION 805

RHABDOSPHAERA HAECKEL, 1894 (COCCOLITHOPHORIDA): VALIDATED UNDER THE PLENARY POWERS

RULING.—(1) Under the plenary powers the following generic names are hereby suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy:

(a) *Cyatholithus* Huxley, 1868;

(b) *Rhabdolithes* Schmidt, 1870.

(2) The following generic names are hereby placed on the Official List of Generic Names in Zoology with the Name Numbers specified:

(a) *Rhabdosphaera* Haeckel, 1894 (gender : feminine), type-species, by designation by Hay and Towe, 1962, *Rhabdosphaera claviger* Murray and Blackman, 1898 (Name No. 1748);

(b) *Coccolithus* Schwarz, 1894 (gender : masculine), type-species, by monotypy, *Coccolithus oceanicus* Schwarz, 1894 (Name No. 1749).

(3) The following specific names are hereby placed on the Official List of Specific Names in Zoology with the Name Numbers specified:

(a) *claviger* Murray and Blackman, 1898, as published in the binomen *Rhabdosphaera claviger* (type-species of *Rhabdosphaera* Haeckel, 1894) (Name No. 2188);

(b) *pelagica* Wallich, 1877, as published in the binomen *Coccosphaera pelagica* (Name No. 2189).

(4) The family-group name COCCOLITHIDAE Poche, 1913 (type-genus *Coccolithus* Schwarz, 1894) is hereby placed on the Official List of Family-Group Names in Zoology with the Name Number 419.

(5) The following generic names are hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology with the Name Numbers specified:

(a) *Cyatholithus* Huxley, 1868 (as suppressed under the plenary powers in (1) above) (Name No. 1897);

(b) *Rhabdolithes* Schmidt, 1870 (as suppressed under the plenary powers in (1) above) (Name No. 1898).

HISTORY OF THE CASE (Z.N.(S.) 1658)

The present application was submitted by Trygve Braarud, M. N. Bramlette, Georges Deflandre, Erwin Kamptner, Alfred R. Loeblich, Jr., Erlend Martini and Helen Tappan in July 1964. The application was sent to the printer on 2 September 1964 and was published on 26 November 1964 in *Bull. zool. Nomencl.* **21** : 397–400. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184). No comment was received.

DECISION OF THE COMMISSION

On 19 September 1966 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (66)51 either for or against the proposals set out in *Bull. zool. Nomencl.* **21** : 399. At the close of the prescribed voting period on 19 December 1966 the state of the voting was as follows:

Affirmative votes—twenty-three (23), received in the following order: Boschma, Holthuis, Simpson, Mayr, Vokes, Obruchev, China, Bonnet, Lemche, Uchida, Binder, Munroe, Jaczewski, Sabrosky, Tortonese, Alvarado, Ride, Stoll, Kraus, Mertens, Forest, Evans, Brinck.

Negative votes—none (0).

Voting Papers not returned—two (2): do Amaral, Hubbs.

Original References

The following are the original references for names placed on Official Lists and Index by the Ruling given in the present Opinion:

claviger, *Rhabdosphaera*, Murray & Blackman, 1898, *Philos. Trans. roy. Soc. London* B (Biol.) **190** : 438, 439, pl. 15, figs. 13, 14

COCCOLITHIDAE Poche, 1913, *Arch. Protistenk.* **30** : 157

Coccolithus Schwarz, 1894, *Ann. Mag. nat. Hist.* (6) **14** : 341–6

Cyatholithus Huxley, 1868, *Trans. roy. Micros. Soc.* (n.s.) **15** : 206

pelagica, *Coccosphaera*, Wallich, 1877, *Ann. Mag. nat. Hist.* (4) **19** : 348

Rhabdolithes Schmidt, 1870, *K. Akad. Wiss. Wien, Math.-Nat. Kl., Sitzungsber.*, Abt. I, **61** (10); 680

Rhabdosphaera Haeckel, 1894, *Systematische Phylogenie der Protisten und Pflanzen* **1** : 111

The following is the original reference for the designation of a type-species for a genus concerned in the present Ruling:

For *Rhabdosphaera* Haeckel, 1894 : Hay & Towe, 1962, *Eclogae Geol. Helvet.* **55** : 504

CERTIFICATE

We certify that the votes cast on Voting Paper (66)51 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 805.

G. OWEN EVANS
Secretary

W. E. CHINA
Assistant Secretary

International Commission on Zoological Nomenclature
London
4 *January* 1967

OPINION 806

GYMNETIS MACLEAY, 1819 (INSECTA, COLEOPTERA): DESIGNATION OF A TYPE-SPECIES UNDER THE PLENARY POWERS

RULING.—(1) Under the plenary powers all designations of type-species, made prior to the present Ruling, for the nominal genus *Gymnetis* MacLeay, 1819, are hereby set aside, and the nominal species *Scarabaeus lanius* Linnaeus, 1758, is hereby designated to be the type of that genus.

(2) The following generic names are hereby placed on the Official List of Generic Names in Zoology with the Name Numbers specified:

(a) *Gymnetis* MacLeay, 1819 (gender : masculine), type-species, by designation under the plenary powers in (1) above, *Scarabaeus lanius* Linnaeus, 1758 (Name No. 1750);

(b) *Cotinis* Burmeister, 1842 (gender : feminine), type-species, by designation by Casey, 1915, *Gymnetis mutabilis* Gory & Percheron, [1836] (Name No. 1751).

(3) The following specific names are hereby placed on the Official List of Specific Names in Zoology with the Name Numbers specified:

(a) *lanius* Linnaeus, 1758, as published in the binomen *Scarabaeus lanius* (type-species of *Gymnetis* MacLeay, 1819) (Name No. 2190);

(b) *mutabilis* Gory & Percheron, [1836], as published in the binomen *Gymnetis mutabilis* (type-species of *Cotinis* Burmeister, 1842) (Name No. 2191).

HISTORY OF THE CASE (Z.N.(S.) 1641)

The present case was submitted to the office of the Commission by Dr. Michael A. Goodrich in March 1964. Dr. Goodrich's application was sent to the printer on 13 July 1964 and was published on 31 December 1964 in *Bull. zool. Nomencl.* **21** : 429–431. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184) and to seven entomological serials. The application was supported by Dr. T. J. Spilman, Dr. Edward A. Chapin, Dr. J. T. Wiebes, Mrs. Patricia Vaurie, and Prof. George W. Byers.

DECISION OF THE COMMISSION

On 19 September 1966 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (66)53 either for or against the proposal set out in *Bull. zool. Nomencl.* **21** : 430–431. It was pointed out on the Voting Paper that the correct gender for *Cotinis* is feminine, as fixed by the original author, and not masculine, as appeared in the published application. At the close of the prescribed voting period on 19 December 1966 the state of the voting was as follows:

Affirmative votes—twenty-three (23), received in the following order: Boschma, Holthuis, Simpson, Mayr, Vokes, Obruchev, China, Bonnet, Lemche,

Uchida, Jaczewski, Binder, Munroe, Brinck, Sabrosky, Tortonese, Alvarado, Ride, Stoll, Kraus, Mertens, Forest, Evans.

Negative votes—none (0).

Voting Papers not returned—two (2): do Amaral, Hubbs.

Original References

The following are the original references for names placed on Official Lists by the Ruling given in the present Opinion:

Cotinis Burmeister, 1842, *Handb. Ent.* **3** : 254

Gymnetis MacLeay, 1819, *Horae Ent.* **1** (1) : 152

lanius, Scarabaeus, Linnaeus, 1758, *Syst. Nat.* (ed. 10) **1** : 352

mutabilis, Gymnetis, Gory & Percheron, [1836], *Mon. Cétoines* (13) : 334

The following is the original reference for the designation of a type-species for a genus concerned in the present Ruling:

For *Cotinis* Burmeister, 1842 : Casey, 1915, *Mem. Coleopt.* **6** : 277

CERTIFICATE

We certify that the votes cast on Voting Paper (66)53 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 806.

G. OWEN EVANS
Secretary

W. E. CHINA
Assistant Secretary

International Commission on Zoological Nomenclature
London
6 *January* 1967

BUGULA OKEN, 1815, AND *SCRUPARIA* OKEN, 1815 (POLYZOA): PROPOSED CONSERVATION UNDER THE PLENARY POWERS. Z.N.(S.) 1390

By J. S. Ryland (*Department of Zoology, University College of Swansea, Wales*)

The generic names *Bugula* and *Scruparia* were first published by Lorenz Oken in Abtheilung 1 (" Fleischlose Thiere ", 1815) of Volume 3 of his *Lehrbuch der Naturgeschichte*, 1815–1816, a work rejected by the Commission, for nomenclatorial purposes, in Opinion 417, published in 1956. At the same time, the International Commission invited zoologists to submit applications for validation under the plenary powers of any name published in the *Lehrbuch*, the rejection of which would, in their opinion, lead to instability or confusion in the nomenclature of the group concerned. The present request is that the genera *Bugula* and *Scruparia* with their type-species should be placed on the Official Lists.

2. Under the heading " Sippschaft Cellularien, Zellkorallinen ", on p. 89, Oken listed four genera:

1. *Bugula*
2. *Cellularia*
3. *Scruparia*
4. *Falcaria*

Of these, the second evidently referred to *Cellularia* Pallas, 1766, and the remainder were new genera. *Falcaria* Oken, however, is a junior homonym of *Falcaria* Haworth, 1809 (Lepidoptera), see Harmer (1923). *Bugula* and *Scruparia* are currently in use for the names of genera of Polyzoa.

3. *Bugula.* The genus is one of the largest and best known in the Polyzoa, being familiar not only to specialists but to marine biologists in general, especially to ecologists and those studying the fouling of ships and harbour installations; moreover, it is widely used as an example in zoological text-books. In these circumstances, to replace *Bugula* by a name (*Acamarchis* Lamouroux) which has been buried in the synonymy for over a century would be folly.

Nevertheless, certain facts concerning the introduction and subsequent validity of *Bugula* as a generic name must be considered, mainly summarized below from the thorough investigations of Harmer (1923).

4. *Bugula* Oken. The species listed by Oken were:

a. Biserial

1. *Cellularia neritina*

Here *Cell. ciliata.*

b. Multiserial

2. *Bugula avicularia*

Linnaeus (1758) founded *Sertularia avicularia* primarily on the biserial species figured by Ellis (1755, Pl. 20, Fig. A), and to this species the Linnaean name is now restricted; but he also included the multiserial species of the same author (Ellis, 1755, Pl. 38, Fig. 7), wrongly citing the plate as 28. Gray (1848)

made *S. avicularia* (*s. str.*) the type-species of a new genus, *Bugulina* (p. 114), while the multiserial species of Ellis (the plate wrongly cited as 58) was described as *Avicularia flabellata* (Thompson, MSS), type-species of *Avicularia* (p. 106). He appears to have overlooked the fact that Oken described *Bugula avicularia* as having its zooids in 3 or 5 series, as he included Oken's species under the synonymy of *Bugulina avicularia*, whereas it should properly have come under *Avicularia flabellata*. *Avicularia* Thompson in Gray is a junior homonym of *Avicularia* Lamarck, 1818 (Arachnida), see Harmer (1923).

Acamarchis was introduced by Lamouroux (1816) for *A. neritina* (L.) and *A. dentata* Lamx., n. sp. *A. neretina* (sic) (*Sertularia neritina* Linnaeus, 1758) was designated type-species by Schweigger (1819, table viii: see Harmer, 1923).

B. neritina, *B. avicularia* and *B. flabellata* are congeneric, whatever the generic name adopted for them. *Bugula* Oken antedates *Acamarchis*, and was used in its modern sense, with *Sertularia neritina* as type-species, by Busk (1852) in his *British Museum Catalogue*, and this usage has continued to the present day. The proposal to validate Oken's generic name is not an expression of approval for the *Lehrbuch*, but a practical necessity occasioned by over a century's uninterrupted usage.

Harmer (1923) attributed the designation of *B. neritina* as type-species of *Bugula* to Hincks (1880), but in fact this was done quite unequivocably by Busk (1852). Busk himself stated that "*B. neritina*, . . . was also taken by Oken as the type of his genus *Bugula*", though there appears to be no indication of this in the *Lehrbuch*.

5. *Scruparia* Oken. The genus was based on nine species, of which *Sertularia chelata* Linnaeus, 1758, was subsequently designated as type-species by Harmer (1923). *Scruparia* has become universally established as a generic name subsequent to Harmer's clarification of the type-species, and no useful purpose would be served by the introduction of an unfamiliar name.

6. The International Commission on Zoological Nomenclature is requested to take the following action:

(1) to use its plenary powers:
  (a) to validate the generic name *Bugula* Oken, 1815, as allowed in Opinion 417, and to designate *Sertularia neritina* Linnaeus, 1758, as the type-species;
  (b) to validate the generic name *Scruparia* Oken, 1815, as allowed by Opinion 417, and to designate *Sertularia chelata* Linnaeus, 1758, as the type-species;

(2) to place the following generic names on the Official List of Generic Names in Zoology:
  (a) *Bugula* Oken, 1815 (gender: feminine), type-species by designation under the plenary powers in (1) (a) above, *Sertularia neritina* Linnaeus, 1758;
  (b) *Scruparia* Oken, 1815 (gender: feminine), type-species by designation under the plenary powers in (1) (b) above, *Sertularia chelata* Linnaeus, 1758;

(3) to place the following names on the Official Index of Rejected and Invalid Generic Names in Zoology:

(a) *Bugulina* Gray, 1848, *List of British Animals*, Pt. I : 114 (a junior objective synonym of *Bugula* Oken, 1815) ;
(b) *Avicularia* Gray, 1848, *List of British Animals*, Pt. I : 105, 146 (a junior homonym of *Avicularia* Lamarck, 1818).

References

Busk, G. 1852. *Catalogue of Marine Polyzoa in the Collection of the British Museum* **1** : 1–54.
Ellis, J. 1755. *Natural History of the Corallines*, 103 pp.
Gray, J. E. 1848. *List of British Animals*, **1** : 91–151.
Harmer, S. F. 1923. *J. Linn. Soc. (Zool.)*, **35** : 293–361.
Haworth, A. H. 1809. *Lepidoptera Britannica*, 137–376.
Hincks, T. 1880. *British Marine Polyzoa*, 601 pp.
Lamarck, J. B. P. A. de 1818. *Animaux sans vertèbres*, **5** : 1–612.
Lamouroux, J. V. F. 1816. *Histoire des Polypiers coralligènes flexibles*, 558 pp.
Linnaeus, C. 1758. *Systema Naturae* (ed. 10), **1**, 824 pp.
Pallas, P. S. 1766. *Elenchus Zoophytorum*, 451 pp.
Schweigger, A. F. 1819. *Beobachtungen auf Naturhistorischen Reisen*, 127 pp.

THE STATUS OF CERTAIN GENUS-GROUP NAMES IN THE EUMENIDAE (HYMENOPTERA, VESPOIDEA). Z.N.(S.) 1689

By J. van der Vecht (*Division of Systematic Zoology of the Leiden University, c/o Rijksmuseum van Natuurlijke Historie, Leiden*)

In H. de Saussure's well known monograph " Études sur la Famille des Vespides " (1852–1858) and in some later works on the same subject this author proposed a considerable number of names for groups of species which he designated by the term " division ". In most cases these divisions formed the primary subdivisions of a genus, and the names thus proposed must be considered to have the status of subgeneric names according to Article 42(d) of the Code, and they should be treated accordingly.

However, for two genera of solitary wasps (Eumenidae) de Saussure created a rather complex classification, in which the primary subdivisions were subgenera, which he subdivided into groups of lower rank (also called " divisions "). In some cases the latter groups were even subdivided again.

It appears that according to the Code the names applied to the secondary or lower subdivisions of the genus cannot be regarded as having been validly proposed. Nevertheless these names have been used or at least recorded in the literature; most of them have been raised to subgeneric or generic rank by later authors, and it is not astonishing that there has arisen a certain amount of confusion concerning the questions of authorship and date of publication of these names.

The pertinent data about the names which present nomenclatorial difficulties are as follows:

1. Genus *Odynerus* Latreille, 1802.

The classification given by H. de Saussure in 1852–3 (*Ét. Fam. Vesp.* **1**) is as follows:

p. 123 subgenus *Symmorphus* Wesmael (not subdivided)
p. 126 „ *Ancistrocerus* Wesmael (divisions I–IV)
p. 151 „ *Leionotus* Saussure (divisions I–V)
p. 217 „ *Oplopus* Wesmael (divisions I and II)

Within these subgenera, the following names have been proposed by H. de Saussure.

A. Subgenus *Ancistrocerus* Wesmael.

Subancistrocerus Saussure, 1855, *Ét. Fam. Vesp.* **3** : 206, for division I (1852) of the subgenus.

Stenancistrocerus Saussure, 1863, *Mém. Soc. Phys. Hist. Nat. Genève* **17** : 216, for a new division of the subgenus, said to correspond to parts of division II of 1852.

Pseudodynerus Saussure, 1855, l.c. : 220, for a new division of the subgenus, said to correspond with group B2 of division II of 1852.

Ancistroceroides Saussure, 1855, l.c. : 221, for division III (1852) of the subgenus.

Hypancistrocerus Saussure, 1855, l.c. : 222, for a new division of the subgenus.

B. Subgenus *Leionotus* Saussure, 1852–3 (=*Odynerus* s. str.; Saussure, 1855 : 223).

Parodynerus Saussure, 1855, l.c.: 245, for division I (1852) of the subgenus.

Hypodynerus Saussure, 1855, l.c. : 225, 250, for division II (1852) of the subgenus.

Epsilon Saussure, 1855, l.c. : 229, 252, for division III (1852) of the subgenus.

Antodynerus Saussure, 1855, l.c. : 242, 287, for division V, subdivisions IA and IB (1852) of the subgenus.

Antepipona Saussure, 1855, l.c. : 244 (1856 : 298), for division V, subdivision IC (1852) of the subgenus.

Stenodynerus Saussure, 1863, *Mém. Soc. Phys. Hist. Nat. Genève* **17** : 228, for a new division, said to correspond to part of division V (1852) of the subgenus.

Pachodynerus Saussure, 1870, *Rev. Mag. Zool.* (2) **22** : 56, for a new division of the subgenus.

C. Subgenus *Oplopus* Wesmael (="*Epipona* Shuckard "[1]; Saussure, 1856 : 302).

Pseudepipona Saussure, 1856, l.c. : 309, for a new division of the subgenus.

All the names listed above have been recorded as names of subgenera of the genus *Odynerus* Latr. by Dalla Torre, 1894 (*Cat. Hym.* **9** : 49, 50).

2. Genus *Alastor* Lepeletier, 1841.

In the first volume of his " Études " H. de Saussure (1853 : 249) grouped the species of this genus in three unnamed divisions, the first of which was further subdivided. In the supplement to this work (*Études* **3**, 1856 : 327–328) the genus was divided as follows: .

A. Subgenus *Alastoroides* Saussure, 1856 : 327, consisting of the divisions:

1. *Paralastoroides* Saussure, 1856 : 328 (one Australian species, *A. clotho* Lep.),

2. the hypothetical division *Antalastoroides* Saussure, 1856 : 328 (" Encore aucun représentant "), and

3. *Hypalastoroides* Saussure, 1856 : 328 (one South-American species).

B. Subgenus *Alastor* s. str., consisting of the divisions:

1. *Paralastor* Saussure, 1856 : 328 (examples: three Australian species mentioned),

2. *Antalastor* Saussure, 1856 : 328 (containing three Old World species), and

3. *Hypalastor* Saussure, 1856 : 328 (containing three American species).

As in the case of the divisions of the subgenera of *Odynerus* Latr. Dalla Torre (1894 : 109) recorded these groups as subgenera of the genus *Alastor*, and likewise there may be doubt about the authorship of the divisional names.

[1] *Epipona* Shuck. sensu Saussure, 1856, is an incorrect spelling of *Epipone* Kirby & Spence, 1815, and the authorship is erroneously ascribed to Shuckard. Moreover the name is an invalid homonym of *Epipone* Latreille, 1804.

H. de Saussure himself has not designated type-species for any of his infra-subgeneric groups, but subsequent authors, using these names for genera or subgenera, have taken this step for the majority of the groups. Generally they have attributed the authorship of the names under discussion to de Saussure, but if the provisions of the Code are strictly applied, it can be defended that the names have not become available until Dalla Torre raised them to subgeneric rank.

After careful consideration of the various aspects of this problem, I have come to the conclusion that it would be preferable to follow the first course and to regard the divisional names enumerated above as available from their first date of publication by H. de Saussure to whom the authorship should be attributed.

In support of this view it may be stated that:

(1) The double level classification within these genera, at present not permitted by the Code, was in de Saussure's time a logical solution for the problem of a very large genus in which " l'impossibilité de trouver des caractères tranchés, et par suite d'établir des divisions régulières " (Saussure, 1852, l.c. : 120) forced the author to accept more or less arbitrary groups. In the case of the unwieldly genus *Odynerus* he did not want to take the responsibility for raising Wesmael's subgenera to generic rank, a step which he would perhaps have been forced to take if he had known that future generations would create rules resulting in making his divisional names unavailable. The results of his valuable pioneering work on the taxonomy of these wasps are best acknowledged by accepting his names.

(2) Attributing the names to Dalla Torre would be unjustified, because this author did no more than enumerate them under the heading " Subg." Anyone interested in the question to what group any of the names has been or can be applied must consult the taxonomic papers of H. de Saussure.

(3) Since de Saussure's works were widely used, the possibility exists that some author between 1855–1870 (when the infra-subgeneric names were published) and 1894 (when Dalla Torre gave these names subgeneric rank) may, intentionally or unintentionally, have used one of de Saussure's names in a subgeneric or generic sense. Such actions, if recognized, might have the result that a species totally different from the one now so considered would have to be accepted as the type of the subgenus. Evidently this would lead to considerable confusion.

A special problem is presented by the name " *Euodynerus* " first used by Dalla Torre, 1904, *Gen. Ins.* **19** : 38. This is one of a series of names proposed by this author for certain groups of Eumenidae by adding the prefix *Eu-* to the existing generic name (*Eualastor*, *Euancistrocerus*, *Euepipona*, etc.), and meant to indicate the nominate subgenus of each of these genera. Most of these names are superfluous and invalid, being isogenotypic with the corresponding generic names.

However, the name *Euodynerus* was proposed for a section (II) of division III of de Saussure's subgenus *Leionotus*, 1852, and since this group does not include the type-species of *Odynerus*, a type-species for *Euodynerus* Dalla Torre had to be

selected from the species contained in the above mentioned section of *Odynerus*, enumerated by de Saussure, 1852, on pp. 177–199 (nrs. 69–99). This was done by Blüthgen (1938, *Konowia* **16** (1937) : 277), who selected as such the palaearctic species *Vespa dantici* Rossi, 1790 (species no. 90, de Saussure, 1852 : 192), even though this act was carried out in a somewhat peculiar way. Actually *Vespa dantici* was selected here as the type of " *Euodynerus* n. gen.", but since Blüthgen simultaneously considered " *Euodynerus* (Dalla Torre) s. str." to be the nominate subgenus of this group, in my opinion the type designation automatically refers to the group indicated by Dalla Torre.

Since 1938 Blüthgen has regarded himself as the author of *Euodynerus*, and in 1961 (*Abh. Deutsch. Akad. Wiss. Berlin, Klasse für Chemie, Geologie und Biol.*, **2** : 234) he has again stated explicitly that *Euodynerus* Dalla Torre should not be considered available.

I am inclined to disagree with Blüthgen that this is the best solution of the problem. Firstly the name *Euodynerus* Dalla Torre should be considered in the light of the nomenclatorial difficulties raised by the complex classification of de Saussure, for Dalla Torre's treatment of the " genus " *Odynerus* is no more than a summary of de Saussure's work. Therefore, if we accept the infra-subgeneric names of de Saussure, we should also do so for the equivalent name(s) of Dalla Torre. Further, it is evident that *Euodynerus* Blüthgen is not a new concept, but merely a redefinition of the group originally named by Dalla Torre. And finally, Blüthgen was not the first to use Dalla Torre's name, for in 1913 J. Brèthes described a new South American wasp as *Odynerus* (*Euodynerus*) *asperatus* n. sp. (*An. Mus. Nac. Hist. Nat. Buenos Aires* **24** : 113). It can be argued that Brèthes thus raised *Euodynerus* (Dalla Torre) to subgeneric rank and should figure as the author of this name. This certainly appears less desirable than ascribing the name to the author who first proposed it, even though he did this in a most unfortunate way. In any case, Blüthgen's *Euodynerus* must be regarded as an invalid homonym.

The best solution of the problem to me seems to have the infra-subgeneric names listed above validated under the plenary powers of the Commission, with as types those species which are currently regarded as such[1]. In the best interest of nomenclatural stability and uniformity the International Commission on Zoological Nomenclature is therefore requested:

1. to use its plenary powers
   (a) to declare as available from their date of publication by H. de Saussure, and with the type-species indicated below, the following names:
      (i) *Ancistroceroides* Saussure, 1855, *Ét. Fam. Vesp.* **3** : 221. Type-species: *Odynerus cruentus* Saussure, 1855.
      (ii) *Antalastor* Saussure, 1856, *Ét. Fam. Vesp.* **3** : 328. Type-species: *Alastor atropos* Lepeletier, 1841. Objectively synonymous with *Alastor* Lepeletier, 1841.
      (iii) *Antepipona* Saussure, 1855, *Ét. Fam. Vesp.* **3** : 244. Type-species: *Odynerus silaos* Saussure, 1853.

[1] So far as I know, no type-species has been designated previously for *Antalastor*, *Antepipona*, *Epsilon*, *Hypalastor* and *Paralastor*.

(iv) *Antodynerus* Saussure, 1855, *Ét. Fam. Vesp.* **3** : 242, 287. Type-species: *Vespa flavescens* Fabricius, 1775.

(v) *Epsilon* Saussure, 1855, *Ét. Fam. Vesp.* **3** : 229, 252. Type-species: *Odynerus dyscherus* Saussure, 1852.

(vi) *Hypalastor* Saussure, 1856, *Ét. Fam. Vesp.* **3** : 328. Type-species: *Alastor angulicollis* Spinola, 1851.

(vii) *Hypalastoroides* Saussure, 1856, *Ét. Fam. Vesp.* **3** : 328. Type-species: *Alastor brasiliensis* Saussure, 1856.

(viii) *Hypancistrocerus* Saussure, 1855, *Ét. Fam. Vesp.* **3** : 222. Type-species: *Odynerus advena* Saussure, 1855.

(ix) *Hypodynerus* Saussure, 1855, *Ét. Fam. Vesp.* **3** : 225, 250. Type-species: *Odynerus chilensis* Lepeletier, 1841, a subjective junior synonym of *Odynerus humeralis* Haliday, 1836.

(x) *Pachodynerus* Saussure, 1870, *Rev. Mag. Zool.* (2) **22** : 56. Type-species: *Odynerus californicus* Saussure, 1870.

(xi) *Paralastor* Saussure, 1856, *Ét. Fam. Vesp.* **3** : 328. Type-species: *Alastor tuberculatus* Saussure, 1853.

(xii) *Paralastoroides* Saussure, 1856, *Ét. Fam. Vesp.* **3** : 328. Type-species: *Alastor clotho* Lepeletier, 1841. Objectively synonymous with *Alastoroides* Saussure, 1856, l.c. : 327 (type designated by Ashmead, 1902, *Canad. Ent.* **34** : 210), which name should be used since it was proposed as a subgeneric name.

(xiii) *Parodynerus* Saussure, 1855, *Ét. Fam. Vesp.* **3** : 245. Type-species: *Odynerus bizonatus* Boisduval, 1833, a subjective junior synonym of *Vespa bicincta* Fabricius, 1781.

(xiv) *Pseudepipona* Saussure, 1856, *Ét. Fam. Vesp.* **3** : 309. Type-species: *Odynerus herrichii* Saussure, 1856.

(xv) *Pseudodynerus* Saussure, 1855, *Ét. Fam. Vesp.* **3** : 220. Type-species: *Odynerus luctuosus* Saussure, 1855.

(xvi) *Stenancistrocerus* Saussure, 1863, *Mém. Soc. Phys. Hist. Nat. Genève* **17** : 216. Type-species: *Odynerus atropos* Lepeletier, 1841.

(xvii) *Stenodynerus* Saussure, 1863, *Mém. Soc. Phys. Hist. Nat. Genève* **17** : 228. Type-species: *Odynerus chinensis* Saussure, 1863.

(xviii) *Subancistrocerus* Saussure, 1855, *Ét. Fam. Vesp.* **3** : 206. Type-species: *Odynerus sichelii* Saussure, 1855.

(b) to declare as available from its date of publication by C. G. de Dalla Torre and with the type-species indicated below, the following name, originally proposed as name for a group of infra-subgeneric rank:

Euodynerus Dalla Torre, 1904, *Gen. Insect.* **19** : 38. Type-species: *Vespa dantici* Rossi, 1790.

2. to place on the Official List of Generic Names in Zoology:

α the names listed in par. 1a above under (i), (iii)–(xi), (xiii)–(xviii),

β the generic name *Alastor* Lepeletier, 1841, *Hist. Nat. Ins. Hym.* **2** :

668 (type-species *Alastor atropos* Lepeletier, 1841, designated by Ashmead, 1902, *Canad. Ent.* **34** : 210),

γ the generic name *Alastoroides* Saussure, 1856, *Ét. Fam. Vesp.*, **3** : 327 (type-species *Alastor clotho* Lepeletier, 1841, designated by Ashmead, 1902, *Canad. Ent.* **34** : 210).

3. to place on the Official Index of Rejected and Invalid Generic names in Zoology:

α *Antalastor* Saussure, 1856, an objective junior synonym of *Alastor* Lepeletier, 1841;

β *Paralastoroides* Saussure, 1856, an objective synonym of *Alastoroides* Saussure 1856, here rejected in favour of the latter name.

4. to place on the Official List of Specific Names in Zoology:

advena Saussure, 1855, as published in the binomen *Odynerus advena* (type-species of *Hypancistrocerus* Saussure, 1855);

angulicollis Spinola, 1851, as published in the binomen *Odynerus angulicollis* (type-species of *Hypalastor* Saussure, 1856);

atropos Lepeletier, 1841, as published in the binomen *Alastor atropos* (type-species of *Alastor* Lepeletier, 1841);

atropos Lepeletier, 1841, as published in the binomen *Odynerus atropos* (type-species of *Stenancistrocerus* Saussure, 1863);

bizonatus Boisduval, 1833, as published in the binomen *Odynerus bizonatus* (type-species of *Parodynerus* Saussure, 1855);

brasiliensis Saussure, 1856, as published in the binomen *Alastor brasiliensis* (type-species of *Hypalastoroides* Saussure, 1856);

californicus Saussure, 1870, as published in the binomen *Odynerus californicus* (type-species of *Pachodynerus* Saussure, 1870);

chilensis Lepeletier, 1841, as published in the binomen *Odynerus chilensis* (type-species of *Hypodynerus* Saussure, 1855);

chinensis Saussure, 1863, as published in the binomen *Odynerus chinensis* (type-species of *Stenodynerus* Saussure, 1863);

clotho Lepeletier, 1841, as published in the binomen *Alastor clotho* (type-species of *Alastoroides* Saussure, 1856);

cruentus Saussure, 1855, as published in the binomen *Odynerus cruentus* (type-species of *Ancistroceroides* Saussure, 1855);

dantici Rossi, 1790, as published in the binomen *Vespa dantici* (type-species of *Euodynerus* Dalla Torre, 1904);

dyscherus Saussure, 1852, as published in the binomen *Odynerus dyscherus* (type-species of *Epsilon* Saussure, 1855);

flavescens Fabricius, 1775, as published in the binomen *Vespa flavescens* (type-species of *Antodynerus* Saussure, 1855; subjective senior synonym of *Odynerus punctum* Fabricius sensu Saussure, 1853 (misidentification) = *Odynerus punctum* Saussure, 1855 (invalid secondary homonym), an originally included species);

herrichii Saussure, 1856, as published in the binomen *Odynerus herrichii* (type-species of *Pseudepipona* Saussure, 1856);

luctuosus Saussure, 1855, as published in the binomen *Odynerus luctuosus* (type-species of *Pseudodynerus* Saussure, 1855);

sichelii Saussure, 1855, as published in the binomen *Odynerus sichelii* (type-species of *Subancistrocerus* Saussure, 1855);
silaos Saussure, 1853, as published in the binomen *Odynerus silaos* (type-species of *Antepipona* Saussure, 1855);
tuberculatus Saussure, 1853, as published in the binomen *Alastor tuberculatus* (type-species of *Paralastor* Saussure, 1856).

STRIX CAPENSIS DAUDIN, 1800 (AVES): PROPOSED SUPPRESSION UNDER THE PLENARY POWERS. Z.N.(S.) 1692

By P. A. Clancey (*Honorary Secretary, South African Ornithological Society List Committee, Durban Museum, S. Africa*)

Since its publication in the *South African Quarterly Journal*, second series, 1834, no. 2, pt. 1, p. 317, the name *Strix capensis* A. Smith has been used with remarkable consistency for the African Grass Owl, the sole notable exception being Roberts, 1940, *Birds of South Africa* p. 146, who used the name *Tyto punctata* (Lichtenstein), 1854. In adopting this latter name Roberts followed his own finding in 1936, *Ann. Transvaal Mus.* **18** (3) : 268, that *Strix capensis* Smith 1834 was a junior primary homonym of *Strix bubo capensis* Daudin, 1800, *Traité d'Ornith.* **2** : 209, for a form of Eagle Owl. Roberts pointed out that if *Strix capensis* be rejected as a junior primary homonym, then the next available name for the Grass Owl was *punctata* Lichtenstein, 1854 *Nomencl.* p. 6. Most authors of recent references and standard works, such as Vincent, 1952, *Check List of Birds of South Africa*; Amadon, 1959, *Journ. Bombay Nat. Hist. Soc.* **55** : 344–346; McLachlan and Liversidge, 1957, *Roberts' Birds of South Africa;* Mackworth-Praed and Grant, 1962, *Birds of Southern Third of Africa* : 506–7; and Clancey, 1964 *Birds of Natal and Zululand* : 225; adopt and conserve Smith's *capensis* for this owl, Vincent going so far as to rule, in a footnote to p. 45 of his Check List of 1952, that " *T. punctata* (Lichtenstein) does not replace *T. capensis* ".

2. Recently, G. F. Mees, 1964, *Zool. Verhandel. Leiden* No. 65 : 45–46, has again raised the question of the species name of the Grass Owl on the basis of information given to him by Dr. L. B. Holthuis, averring that Roberts (1936) was right in claiming that *Strix capensis* Smith, 1834, is preoccupied by the earlier primary homonym *Strix bubo capensis* Daudin, 1800. This is correct since Daudin in redescribing the

"Grand Duc Strix bubo
Buffon, pl. enl. 435 Linné, Faun. Suec."

on page 208–209 followed on page 209–210 by describing seven varieties of it A to G. Variety B he called the Grand Duc d'Afrique, *Bubo capensis*. Some workers have assumed that by writing Bubo with an initial capital, Daudin established a sub genus *Bubo* for the eagle owls but Daudin often used initial capitals for both species and varieties. There is no doubt that the name *Bubo* was used as Linné's species and that *Capensis* was the African variety of it because Daudin says so. Sherborn was of the opinion that Daudin used trinomials in 1800 and therefore does not list his " variety " names in the *Index Animalium* 1758–1800.

3. Since *S. capensis* Daudin, 1800, is an available name which is a senior primary homonym of *S. capensis* Smith, 1834, it will be necessary to apply to the Commission for its suppression under the plenary powers in order to conserve the well used name *capensis* Smith which has been used so consistently until Roberts replaced it by *punctata* Lichtenstein, 1854 in his 1936 work.

4. The International Commission on Zoological Nomenclature is therefore requested by the South African Ornithological Society:

(1) to use its plenary powers to suppress the specific name *capensis* Daudin, 1800, as published in the combination *Strix bubo capensis*, for the purposes of both the Law of Priority and the Law of Homonymy;

(2) to place the specific name *capensis* Daudin, 1800, as published in the combination *Strix bubo capensis* (as suppressed under the plenary powers in (1) above) on the Official Index of Rejected and Invalid Specific Names in Zoology;

(3) to place the specific name *capensis* Smith, 1834, as published in the combination *Strix capensis*, on the Official List of Specific Names in Zoology.

BIRADIOLITES D'ORBIGNY, 1850 AND *DURANIA* DOUVILLÉ, 1908 (BIVALVIA): PROPOSAL TO PLACE ON THE OFFICIAL LIST OF GENERIC NAMES IN ZOOLOGY. Z.N.(S.) 1765

By Ralph Myers (*Department of Geology, The University of Texas, Austin, Texas*)

Biradiolites d'Orbigny, 1850 and *Durania* Douvillé, 1908 have been two of the most widely recognized genera of the Radiolitidae for over fifty years; during this time there has been no question of their nomenclatural integrity. However, in a recent nomenclatural note (Coogan, 1966) *Durania* is said to be a junior objective synonym of *Biradiolites*, and a new generic name is proposed for the species previously placed in *Biradiolites*. The object of this petition is to conserve the generic names *Biradiolites* and *Durania* by clarifying the questions raised by Coogan about the type-species of *Biradiolites*. The facts of this case are:

2. In 1850 d'Orbigny published the generic name *Biradiolites* d'Orb. 1847* with five nominal species (in this order): *Biradiolites canaliculata* d'Orb. 1847, *Hippurites cornupastoris* DesMoulins 1826, *Biradiolites quadrata* d'Orb. 1847, *Biradiolites angulosa* d'Orb. 1847, and *Biradiolites fissicostata* d'Orb. 1847. D'Orbigny did not designate a type-species for this genus.

3. During the following half-century no unequivocal type-designation for *Biradiolites* was made. However, two conchology manuals (Woodward, 1854; Fischer, 1887) included similarly ambiguous indications, one of which has been cited as a type-designation (Fischer, 1887; cited by Coogan, 1966). Under the heading " *Radiolites*, Lamarck, 1801 " Woodward (1854, p. 286) wrote:

" Sub-genus? *Bi-radiolites*, D'Orb. *R. canaliculatus* . . . ",

whereas Fischer (1887, p. 1066–1067) stated under the heading " *Biradiolites*. A. d'Orbigny ":

" Sections. *Biradiolites*, sensu stricto . . . [description]
(*B. cornu-pastoris*, C. des Moulins)."

Neither of these indications is a clear type-designation; contrary to the implication by Coogan (1966), Fischer did not use the word " type " in his discussion of the sections of *Biradiolites*.

4. Although Douvillé's " Classification des radiolites " provides no new nomenclatural information for this case, it has been cited in support of a proposal contra the purpose of this petition. In a historical introduction Douvillé (1902, p. 645) summarized Fischer's (1887) listing of four sections in *Biradiolites* including the species names in parentheses after each section name as in Fischer. In the classification Douvillé (p. 477), without making a nomenclatural distinction, separated *Biradiolites cornupastoris* (DesMoulins) from another three of d'Orbigny's original five species in *Biradiolites: angulosus, canaliculatus*, and *fissicostatus*.

5. Then, in 1908 Douvillé (p. 309) formally recognized the division of *Biradiolites* that he had indicated in 1902; he proposed the genus *Durania* (type-species *Biradiolites cornupastoris*, by original designation).

* D'Orbigny gives the date 1847 in his text, but the applicable parts of his " Pal. franç. Ter. crét. Tome quat." were not published until 1850.

6. The following year Toucas made the first unambiguous type-designation for *Biradiolites*. Toucas (1909, p. 98) stated under the heading " Genre *Biradiolites* d'Orbigny 1847 ":

> " Le type du genre est le *Biradiolites canaliculatus* d'Orb. du Coniacien des Martigues (Bouches-du-Rhône)."

7. Since 1909 usage of rudistid paleontologists has shown the overwhelming acceptance of *Durania* Douvillé and of *Biradiolites* d'Orbigny as emended by Toucas, that is, without *Hippurites cornupastoris*. But, in 1966 Coogan contended that *Durania* Douvillé, 1908 is an objective synonym of *Biradiolites* d'Orbigny 1850. This statement is based on his belief that Fischer (1887) first listed the type-species of *Biradiolites* as *B. cornu-pastoris* [see paragraph (3) above], which is the type-species of *Durania* Douvillé by original designation. Coogan states that Fischer's type selection is confirmed by Douvillé's (1902) summary of Fischer's discussion [see paragraph (4) above]. Coogan would transfer the species now in *Durania* to *Biradiolites* and create a new generic name *Eubiradiolites* (type *Biradiolites canaliculatus*) for the species that have been correctly assigned to *Biradiolites*.

8. The basis for the nomenclatural changes proposed in the preceding paragraph is erroneous: Fischer (1887) did not validly designate *B. cornupastoris* the type-species of *Biradiolites*. In order to rectify this error, I now ask the International Commission on Zoological Nomenclature:

(1) to place on the Official List of Generic Names in Zoology:
  (a) *Biradiolites* d'Orbigny, 1850, type species by subsequent designation by Toucas, 1909, *Biradiolites canaliculatus* d'Orbigny, 1850;
  (b) *Durania* Douvillé, 1908, type species by original designation *Hippurites cornupastoris* DesMoulins, 1826;

(2) to place on the Official List of Specific Names in Zoology:
  (a) *canalicalatus* d'Orbigny, 1850, as published in the binomen *Biradiolites canaliculatus* (type-species of *Biradiolites* d'Orbigny, 1850);
  (b) *cornupastoris* DesMoulins, 1826, as published in the binomen *Hippurites cornupastoris* (type-species of *Durania* Douvillé, 1908);

(3) to place on the Official Index of Rejected and Invalid Generic Names in Zoology: *Eubiradiolites* Coogan, 1966 (an objective synonym of *Biradiolites* d'Orbigny, 1850).

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ORTHUNGA DOHRN, 1859 (INSECTA: HEMIPTERA): PROPOSED ADDITION TO THE OFFICIAL LIST OF GENERIC NAMES IN ZOOLOGY. Z.N.(S.) 1767

By Pedro Wygodzinsky (*The American Museum of Natural History, New York*) and Roland F. Hussey (*University of Florida, Gainesville*)

The purpose of the present notice is to bring to the attention of the International Commission on Zoological Nomenclature the genus-group name *Iccius* Dohrn, 1859, and to request that (1) it be placed on the Official Index of Rejected Names and (2) that *Orthunga* Dohrn, 1859, first proposed unnecessarily as a substitute for *Iccius*, be placed on the Official List of Generic Names in Zoology.

2. The name *Iccius* was proposed by Anton Dohrn (1859, *Catalogus Hemipterorum*, p. 52) for a (new) genus of reduviid Hemiptera of the subfamily Emesinae. The one species listed under it, *wahlbergi* Stål, had originally been described by Stål in 1855 under the genus *Emesa*. *Iccius* Dohrn was validly published and became available in 1859.

3. In the " Addenda et Corrigenda " of his " Catalogus Hemipterorum," at page 105, Dohrn wrote: " Seite 52 lies statt *Jccius* [sic] Dohrn: *Orthunga* Dohrn." No reason was given for this proposed change.

4. Thus we have, in one and the same publication, two new names proposed simultaneously for the same taxon. Article 24 (a) of the International Code states explicitly the relative priority of names so published " is determined by the action of the first reviser," and Article 24 (a) (i) of the Code states: " The expression ' first reviser ' is to be rigidly construed. In the case of synonyms, an author must have cited two or more such names, must have made it clear that he believes them to represent the same taxonomic unit, and must have chosen one as the name of the taxon." The requirements of this Section of the Code were first met by Wygodzinsky (1966, " A monography of the Emesinae (Reduviidae, Hemiptera)," *Bull. amer. Mus. nat. Hist.* **133** : 1–614, at page 146).

5. Since its original publication in 1859, the name *Iccius* has never been used in the zoological literature for an emesine bug. The name *Orthunga* has been used continuously since that date, in many shorter papers and in several monographic reviews of the Emesinae. Indeed, authors generally have overlooked not only the publication of *Iccius* in Dohrn's catalogue, but also the fact that *Orthunga* was first proposed in that same work, and have consistently cited the latter name as dating from a subsequent publication by Dohrn (1860, " Beiträge zu einer monographischen Bearbeitung der Familie der Emesina," *Linnaea Entomol.* **14** : 208–255).

6. *Iccius* Dohrn, 1859, is clearly a *nomen oblitum*. If it is recognized as having page priority over *Orthunga*, and especially if, as stated above, the latter was an unnecessary substitute, then *Iccius* must replace *Orthunga* and this would lead to nomenclatorial confusion. Further, the recognition of *Iccius* Dohrn

would necessitate renaming the tenebrionid genus *Iccius* Champion (1886, *Biol. Centr.-Amer., Coleop.* **4** (1) : 147).

For the reasons stated above, we now ask the International Commission on Zoological Nomenclature to take the following actions in the interest of nomenclatorial stability:

(1) to place the generic name *Iccius* Dohrn, 1859, type-species by monotypy *Emesa wahlbergi* Stål, 1855, on the Official Index of Rejected and Invalid Generic Names in Zoology;

(2) to place the following generic name on the Official List of Generic Names in Zoology: *Orthunga* Dohrn, 1859, first proposed as a substitute for *Iccius* Dohrn and therefore with the same type-species;

(3) to place the following specific name on the Official List of Specific Names in Zoology: *wahlbergi* Stål, 1855, as published in the binomen *Emesa Wahlbergi* (type-species of *Orthunga* Dohrn).

PROPOSALS FOR STABILIZATION OF THE NAMES OF SOME COMMON EUROPEAN OPHIUROIDEA Z.N.(S.) 1772

By Ailsa M. Clark (*British Museum* (*Natural History*), *London*)

Ophiura

To sum up the problem, the species generally accepted for the last fifty years as type-species of *Ophiura*, namely *O. texturata* Lamarck, 1816, designated by H. L. Clark, 1915, is not among those eligible for selection included in Lamarck's original account of the genus in 1801.

If the logical species were accepted as type from among those eligible, i.e. *Ophiura lacertosa* Lamarck, 1801 (a synonym of *Asterias longicauda* Retzius, 1805), then our concept of *Ophiura* would be drastically altered and it would need to be removed to the family Ophiodermatidae, being a senior synonym of *Ophioderma* Müller and Troschel, 1840. In fact this has already been done by Lyman in 1860 but overthrown by Bell (1891) followed by H. L. Clark, on grounds which are invalid under the Rules. To avoid a reversion to Lyman's usage the International Commission is now asked to exert its plenary powers to validate the generic name *Ophiura* only from Lamarck, 1816.

In detail the case is as follows:

The first use of *Ophiura* as a generic name was that of Lamarck (1801). He included two species:

'*Ophiura lacertosa*. n. *Asterias ophiura* Lin. *Asterias longicauda* Linck Stell. p. 47, t. xi, no. 17. Encycl. pl. 122, f. 4.

Ceux qui ont les rayons dichotomes.

Ophiura caput medusae. n. *Asterias caput medusae* Lin. *Astrophyton* Linck Stell. t. 18 f. 29 et t. 19, f. 30. Encycl. pl. 129'.

Thus *Ophiura* was then co-extensive with the entire sub-class Ophiuroidea as now understood.

In 1816 Lamarck split off a second genus, *Euryale* (into which *caput medusae* disappeared as a synonym of *E. verrucosum*) and expanded *Ophiura* to include twelve species he had studied personally as well as six others he had not seen. The first two species named were *Ophiura texturata* (for *Stella lacertosa* Linck, 1733, pl. 2, no. 4) and *Ophiura lacertosa* (for *Stella longicauda* Linck, pl. 11, no. 17)—the latter as in 1801.

In 1836 Agassiz split off *Ophiocoma* for species with flaring arm spines and re-diagnosed *Ophiura*, naming two species—*O. texturata* Lamarck and *O. lacertosa* Lamarck.

In 1839 (and again in 1841) Forbes, writing only about British echinoderms, re-diagnosed *Ophiura* again, referring to the scaled disc with large fiddle-shaped plates (the radial shields) opposite the arm bases. Although he commented that the genus ' is restricted to the lacertose Ophiurae ', his diagnosis would tend to exclude the species represented in Linck's pl. 11, i.e. *Ophiura lacertosa* Lamarck, since it has a fully granule-covered disc, were it not already excluded on the ground of its non-British distribution (it comes from the Mediterranean).

Forbes included in *Ophiura* only two species, *Ophiura texturata* Lamarck and a new species, *O. albida*. In the synonymy of *texturata* he included *Stella lacertosa* Linck and *Asterias lacertosa* Pennant, 1777; it is possible that he had these in mind in referring to ' lacertose Ophiurae ' rather than *lacertosa* Lamarck but the latter would have matched even less well the diagnosis of the only other genus that Forbes recognized, *Ophiocoma* Agassiz.

In 1840 and 1842 Müller and Troschel abandoned the name *Ophiura* and established several new genera including *Ophioderma* and *Ophiolepis;* they also discarded Lamarck's *texturata* and *lacertosa* as synonyms, *lacertosa* being referred to *Ophioderma longicauda* (*Stella lumbricalis longicauda* Linck and *Asterias longicauda* Retzius) from the Mediterranean and *texturata* to the synonymy of *Ophiolepis ciliata* (*Stella lacertosa* Linck, *Asterias ophiura* O. F. Müller or *Asterias ciliata* Retzius) from European Seas. *Ophioderma longicauda* dates from Retzius, 1805, and *ciliata* from Retzius, 1783, Linck being pre-Linnaean.

In 1859 Lütken adopted Forbes' usage of *Ophiura* and gave a detailed diagnosis, which would serve even more to exclude *lacertosa* Lamarck; he also added several new species congeneric with *texturata* by present standards. At the same time he commented that, strictly speaking, the name *Ophiura* does not belong to Forbes' genus but to the one called *Ophioderma* by Müller and Troschel. He said that the type-species of *Ophiura* Lamarck is *O. lacertosa* Lamarck.

Accordingly Lyman in 1860 (and again in 1865) transferred the generic name *Ophiura* to Müller and Troschel's *Ophioderma* (which became a synonym) and proposed the new name *Ophioglypha* for *Ophiura*: Forbes *non* Lamarck. As type-species of *Ophioglypha* he designated in 1865 '*Ophioglypha lacertosa* Lyman ' with *Stella lacertosa* Linck pl. 2, no. 4, ?*Ophiura texturata* Lamarck, *Ophiura texturata*: Forbes and *Ophiura texturata*: Lütken in the synonymy. The type-species should therefore properly be termed *Ophiura texturata* Lamarck, in spite of the question mark.

Ljungman (1867) compromised by using the generic name *Ophioderma* Müller and Troschel for *longicauda* Retzius, with *Ophiura* Lamarck in the synonymy, ignoring its priority, but he retained the specific name *texturata*, though attributing it to Forbes, within *Ophioglypha* Lyman, putting *Ophioglypha lacertosa* Lyman in the synonymy.

In 1870 Lütken expressed doubt about his earlier comment which had provoked Lyman's drastic action. However, following Lyman's continued usage of *Ophioglypha* (notably in his monographic ' Challenger ' report), Lütken himself appears to have come round, since *Ophioglypha* was used in his work of 1899 in collaboration with Mortensen. *Ophioglypha* was also adopted by Koehler in his earlier works such as the ' Siboga ' reports of 1904 and 1905.

Meanwhile, however, in 1891 Bell reiterated the early nomenclatorial history of the genus as given here, pointed out Lütken's second thoughts and made the following rather cryptic statement ' By 1842 (i.e. following publication of Müller and Troschel's ' System der Asteriden ') then the partition of Lamarck's genus *Ophiura* as emended by Agassiz was completed and no spoil was left for Mr. Lyman. It follows therefore that those writers who have continued

to use *Ophioderma* and have not allowed *Ophioglypha* to displace *Ophiura* are correct.'

I fail to see this myself, nevertheless H. L. Clark (1911) subsequently commented ' there seems to be no escape from Bell's reasoning which shows clearly that *Ophioglypha* Lyman is a pure synonym of *Ophiura* as limited by Agassiz and then by Forbes.' Dr. Clark's reversion to *Ophiura* (in the sense of Forbes) and *Ophioderma* was generally adopted and *Ophioglypha* has not been used by any Ophiuroid specialists since his ' Catalogue of the Ophiurans ' was published in 1915.

However, if *Ophiura* is dated from its first appearance in 1801, rather than 1816 as H. L. Clark put in the Catalogue, then there is no escaping the fact that the type-species must be selected from *Ophiura lacertosa* Lamarck, *Asterias ophiura* Linnaeus (given as a synonym) or *A. caput medusae* Linnaeus, since these are the only eligible names actually included. The last can be ruled out as beyond the concept of *Ophiura* of any subsequent writer including Lamarck himself.

As for *Asterias ophiura* Linnaeus, this would appear to be a senior synonym of *Ophiura lacertosa* Lamarck. Mortensen (1920 and 1933) was provoked by H. L. Clark's revival in 1915 of *ophiura* Linnaeus in place of *texturata* Lamarck as the name for the type-species of *Ophiura* to investigate the identity of Linnaeus' species. Although Linnaeus' diagnosis of 1758 would have applied to any ophiuroid, his modified one of 1761 was slightly more precise, describing the disc as squamose. Mortensen pointed out that this does indicate identity with the genus currently called *Ophiura* (i.e. sensu Forbes) but there are at least five other species of *Ophiura* besides *texturata* Lamarck known from the ' Oceano Norvegico ' given as locality by Linnaeus at the same time and that it is impossible to tell which one was intended. Evidently two specimens survived in the museum at Uppsala from the old Swedish royal collection labelled *Asterias ophiura* Linnaeus. However, these only serve to add to the confusion since they were of *Ophioderma*, not of *Ophiura texturata* Lamarck or a related species, and so could not have come from Norwegian waters; Mortensen therefore refused to accept them as Linnaeus' type-material.

Although Mortensen's dispositions were followed by other echinoderm specialists, it seems to me that *Asterias ophiura* Linnaeus remains as a threat to the stability of the current nomenclature and would be better formally suppressed on the grounds of uncertain identity.

Also, in order to maintain the current recognition of the genus *Ophiura* it is desirable that the Commission exercise its plenary powers to suppress *Ophiura* Lamarck, 1801 and to validate *Ophiura* Lamarck, 1816 with type-species *Ophiura texturata*, designated by H. L. Clark on the grounds of the tautonomy of *Asterias ophiura* Linnaeus, to the synonymy of which he referred it.

Hertz (1927) and Fell (1960) accepted H. L. Clark's usage of *Ophiura ophiura* without going into the matter but other specialists since 1920 have followed Mortensen in adopting *texturata*. Clearly from Mortensen's findings there is sufficient doubt about the true identity of *Asterias ophiura* Linnaeus to justify its rejection. Not only does the only extant material of Linnaeus disagree

with his more precise diagnosis and locality but also the several references he quoted for comparison deal with a variety of different ophiuroids.

Bell (1891) considered that *texturata* is a synonym of *Asterias ciliaris* Linnaeus, 1767, because of a figure of Barrelier's (1714) cited by Linnaeus. However, Mortensen discards this figure as more likely to be of a species of *Ophiothrix;* from Barrelier's scope—France, Spain and Italy—this is most likely to be *Ophiothrix fragilis* (Abildgaard).

Likewise *Asterias ciliata* O. F. Müller, 1776, is most probably an *Ophiothrix*. At the same time it invalidates as a senior homonym the name *Asterias ciliata* Retzius, 1783, which Mortensen believed could be conspecific with *Ophiura texturata*.

However, Koehler (1921) used yet another name which antedates *O. texturata* Lamarck; this is *Asterias lacertosa* Pennant, 1777. Mortensen (1920) considered *Stella lacertosa* Linck, 1733 and rejected it on the grounds of its pre-linnaean date, passing over the fact that Pennant's use of the name served to validate it. Pennant's material was from Anglesea and his brief description and poor illustration might apply to any of the three species of *Ophiura* known from that area, *O. albida*, *O. affinis* and *O. texturata*.

If it were desirable that *lacertosa* be revived this might still be done on the grounds that Pennant referred to Linck's pl. 2, no. 4, which Mortensen accepts as clearly recognizable as based on a specimen of *texturata* Lamarck. However, this same figure of Linck's was also referred to (among others) by Linnaeus under the name of *ophiura* and by Lamarck under the name *texturata*. Indeed, since Mortensen ascertained from Professor Joubin that Lamarck's type-material of *O. texturata* is lost, the best way of validating the name would be for Linck's figure to be designated as representing the lectotype of *Ophiura texturata*.

Even if *Asterias lacertosa* Pennant is suppressed for the purposes of the law of priority, it may still invalidate *Ophiura lacertosa* Lamarck, 1801 as a secondary homonym, although only tacitly included in *Ophiura* at that time along with all the other known Ophiuroids. It would therefore be better if the suppression were extended also to the law of Homonymy in this case. This would leave *Asterias longicauda* Retzius, 1805, as the valid name for the type-species of *Ophioderma* Müller and Troschel, 1842, designated also by H. L. Clark, 1915.

Ophiothrix fragilis (Abildgaard), 1789

H. L. Clark (1915) lists both *Asterias fragilis* Abildgaard *in* O F. Müller, 1789 and *A. pentaphylla* Pennant, 1777 as separate species of *Ophiothrix* Müller and Troschel, nominating the latter as type-species. This derives indirectly from the first designation of a type-species for *Ophiothrix*, namely that of Lyman (1865) who gave *Ophiocoma rosula* Forbes, 1841; this specific name is eligible under the Rules though included only as a synonym of *Ophiothrix fragilis* by Müller and Troschel (1840) and with author Johnston (1836). H. L. Clark, followed by Fell (1960) resurrect the earlier combination *Ophiura rosula* Fleming, 1828, mentioned neither by Müller and Troschel nor by Lyman, though cited by Forbes himself, and refer it to the synonymy of *pentaphylla*. Unfortunately, most workers on European ophiuroids, including Koehler (1921

and 1924), Mortensen (1927) and Tortonese (1965) consider that *pentaphylla* is, at best, a variety of *fragilis* but nevertheless consistently use the latter name in spite of its later date.

Asterias pentaphylla together with *A. varia*, *aculeata*, *hastata*, *fissa* and *nigra* described by Pennant in that order from a series of figures of Cornish ophiuroids given by Borlase (1758) in a non-binomial work, were all cited by Bell as synonyms of *Ophiothrix fragilis*. Consequently if *fragilis* is to be preserved at all, it is necessary for the other names used by Pennant to be suppressed. This needs to be done by the exercise of the Commission's plenary powers since Borlase's figures are good enough to be recognized as of specimens of *Ophiothrix* and there is no other species than what is commonly called *fragilis* represented in the Cornish fauna; only *aculeata* is already invalidated, as a homonym of *Asterias aculeata* Linnaeus, the type-species of the genus *Ophiopholis*.

Abildgaard's coloured plate of *Asterias fragilis* is good enough for recognition of the species and no designation of a lectotype seems necessary.

Ophiopholis aculeata (Linnaeus), 1767

Here though it would be as well if a lectotype were selected. Linnaeus (1767) gives a brief diagnosis and description of *Asterias aculeata* but only ' in Oceano ' for locality. However, he quotes several of Linck's figures, including pl. 26, no. 42 and 43, pl. 37, no. 65 and pl. 40, no. 71. The best of these is the last, pl. 40, no. 71 and accordingly that is now recommended for designation to represent lectotype of *Asterias aculeata*.

Ophiolepis (*Ophiopholis*) *scolopendrica* Müller and Troschel, 1842, named as type-species of *Ophiopholis* by H. L. Clark (1915), is a synonym of *Asterias aculeata* Linnaeus.

Ophiocomina nigra (Abildgaard), 1789

After H. L. Clark (1915) revived *Asterias sphaerulata* Pennant (1777) for this species and simultaneously referred it to the genus *Ophiacantha*, Mortensen (1920) protested strongly that Pennant's description and figure were unrecognizable. Subsequent ophiuroid specialists have all followed Mortensen's usage of *Ophiocomina nigra* (Abildgaard), 1789, but it would be as well if Pennant's *Asterias sphaerulata* were formally rejected, which action the Commission is now requested to undertake.

It must also be pointed out here that *Asterias nigra* Abildgaard, 1789, is a junior homonym of *A. nigra* Pennant, 1777. Accordingly the request for suppression of *A. nigra* Pennant made under the heading of *Ophiothrix fragilis* must be extended to cover the Law of Homonymy as well as the Law of Priority.

The International Commission on Zoological Nomenclature is therefore asked to preserve the accustomed terminology of these taxa of ophiuroids by taking the following action:

(1) use its plenary powers to suppress for the purposes of both the Law of Priority and the Law of Homonymy the usage of the generic name *Ophiura* by Lamarck, 1801, in order to validate *Ophiura* Lamarck, 1816.

(2) use its plenary powers to suppress the following specific names for the purposes of the Law of Priority but not for those of the Law of Homonymy:

(a) *ophiura* Linnaeus, 1758, as published in the binomen *Asterias ophiura*;

(b) *ciliaris* Linnaeus, 1767, as published in the binomen *Asterias ciliaris;*

(c) *ciliata* O. F. Müller, 1776, as published in the binomen *Asterias ciliata;*

(d) *pentaphylla* Pennant, 1777, as published in the binomen *Asterias pentaphylla;*

(e) *varia* Pennant, 1777, as published in the binomen *Asterias varia;*

(f) *hastata* Pennant, 1777, as published in the binomen *Asterias hastata;*

(g) *fissa* Pennant, 1777, as published in the binomen *Asterias fissa;*

(h) *sphaerulata* Pennant, 1777, as published in the binomen *Asterias sphaerulata.*

(3) use its plenary powers to suppress the following specific names for the purposes of the Law of Priority and the Law of Homonymy:

(a) *lacertosa* Pennant, 1777, as published in the binomen *Asterias lacertosa;*

(b) *nigra* Pennant, 1777, as published in the binomen *Asterias nigra.*

(4) place the above names on the appropriate Lists of Rejected and Invalid Names in Zoology.

(5) place the following names on the Official List of Generic Names in Zoology:

(a) *Ophiura* Lamarck, 1816 (gender: feminine) type-species *Ophiura texturata* Lamarck, 1816, designated by H. L. Clark, 1915;

(b) *Ophioderma* Müller and Troschel, 1840 (gender: feminine) type-species *Asterias longicauda* Retzius, 1805, designated by H. L. Clark, 1915;

(c) *Ophiothrix* Müller and Troschel, 1840 (gender: feminine) type-species *Ophiura rosula* Fleming, 1828, designated by Lyman, 1865;

(d) *Ophiopholis* Müller and Troschel, 1842 (as subgenus of *Ophiolepis*) (gender: feminine) type-species *Ophiolepis* (*Ophiopholis*) *scolopendrica* Müller and Troschel, 1842, designated by H. L. Clark, 1915;

(e) *Ophiocomina* Koehler *in* Mortensen, 1920 (gender: neuter) type-species *Asterias nigra* Abildgaard *in* O. F. Müller, 1789.

(6) place the following names on the Official List of Specific Names in Zoology:

(a) *texturata* Lamarck, 1816, as published in the binomen *Ophiura texturata*, with Linck's pl. 2, no. 4 (1733) designated to represent the lectotype;

(b) *longicauda* Retzius, 1805, as published in the binomen *Asterias longicauda*, with Linck's pl. 11, no. 17 (1733) designated to represent the lectotype;

(c) *fragilis* Abildgaard *in* O. F. Müller, 1789, as published in the binomen *Asterias fragilis*, the holotype represented by Abildgaard's pl. xcviii;

(d) *aculeata* Linnaeus, 1767, as published in the binomen *Asterias aculeata*, with Linck's pl. 40, no. 71 designated to represent the lectotype and

(e) *nigra* Abildgaard *in* O. F. Müller, 1789, as published in the binomen *Asterias nigra*, the holotype represented by Abildgaard's pl. xciii.

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DICTYONEMA FLABELLIFORME (EICHWALD, 1840) (GRAPTOLITHINA): APPLICATION FOR CONSERVATION UNDER THE PLENARY POWERS BY DESIGNATION OF A NEOTYPE. Z.N.(S.) 1776

By O. M. B. Bulman (*Sedgwick Museum, Cambridge, England*)

In 1840, E. Eichwald erected a species *Gorgonia flabelliformis* for a dendroid graptolite occurring in the Tremadocian shales of Estonia (1840a, p. 207; 1840b, p. 220). No figure was published and the description was by modern standards quite inadequate. A somewhat more complete description was published in 1842 (p. 45–47), together with a rather diagrammatic figure (Pl. 1, fig. 6). In 1855 (p. 453), he erected a new genus *Rhabdinopora* for the species *R. undulata* and also assigned to this his earlier species *Gorgonia flabelliformis*, but *G. flabelliformis* was recognized as belonging to the genus *Dictyonema* Hall 1851 by F. Schmidt (1861 (1858) p. 44) and this attribution has never since been questioned, although the modified form *Dictyograptus* was proposed by Hopkinson and Lapworth (1875) and gained some currency, particularly in Scandinavian literature, until the early years of this century.

2. During the past hundred years, Eichwald's species has been recognized in northwest Europe, North America, South America and North Africa as an important Tremadocian zone fossil; the name is accordingly widespread in stratigraphical as well as palaeontological literature. It has, however, never been properly fixed by reference to a type. Eichwald's originals were presumed lost and the concept of the species has grown up mainly around " typical " Scandinavian and British material which certainly showed general agreement with what was believed to be topotype material represented in some of the larger museums of western Europe. In particular, the Norwegian form *Dictyonema graptolithinum* Kjerulf 1865 has been used as a standard, and to a large extent the customary modern usage follows Brøgger (1882) who employed the name " *Dictyograptus flabelliformis* Eichw., form. *typica* ", citing *Dictyonema graptolithinum* Kjerulf as synonym (p. 31). Eichwald had, in 1842 (p. 47), identified his species with Hisinger's " *impressio plantae mon*[*o*]*-cotyledoneae* " (Hisinger 1840) adding Berg (Ostergotland) to his list of localities but although Hisinger's type was re-described by Tullberg in 1882 as *Dictyonema flabelliforme*, this is clearly the subspecies *D. flabelliforme sociale* (Salter).

3. Salter (1857) proposed the name *Graptopora socialis* n. sp. (and n.g. " lest the English species should prove distinct from the larger Scandinavian form *Gorgonia flabelliformis* Eichwald) " (1857, p. 65) and this had evidently been used in correspondence between Salter and Kjerulf because the name was used in print by Kjerulf in 1857 prior to his description of *D. graptolithinum*. *Dictyonema sociale* was figured by Salter in 1866 (Pl. 4, figs. 1, 1a–c) and for many years this name was favoured by English and Belgian stratigraphers (e.g., Dewalque 1880, Malaise 1881) for what would now be known as *D. flabelliforme*. " *D. sociale* " of Salter appears to be a senior synonym of " var. *conferta* Linnarsson manuscr." of Brøgger (1882, p. 35) and for the past forty years has

been regarded as a subspecies of *flabelliforme*. Kjerulf's *D. norvegicum* and numerous other forms described during the present century are also now generally regarded as subspecies of the central form *Dictyonema flabelliforme* (Eichwald).

4. In 1953, Obut claimed to have discovered the originals of Eichwald's species in the museum of the Institute of Historical Geology in Leningrad. The labels accompanying these six specimens are in Eichwald's handwriting (1953, p. 37). Four of these syntypes are conspecific and from among these Obut has selected (1953, p. 39) as lectotype the best preserved, $1/28a_2$; they have been redescribed and adequately figured and it is at once apparent that these do not correspond with the generally accepted concept of *Dictyonema flabelliforme*. Of the two remaining specimens, one can only be identified as *Dictyonema* sp. and the other, also poorly preserved, is assigned by Obut to *D. graptolithinum* Kjerulf.

5. Obut stated that the majority, including the lectotype, are identical with Kjerulf's *Dictyonema norvegicum* (1865, p. 1). What are probably Kjerulf's syntypes have been examined and re-described (Bulman 1966a), and despite differences in appearance due largely to differing preservation and matrix, their identity with Eichwald's specimens as described by Obut is confirmed. Among the distinctive features are the slightly zig-zag stipes as well as the character (size and spacing) of the dissepiments. The stipe character (" nicht ganz g[e]rade, sondern, wellenförmig hin und her gebogen ") was mentioned by Eichwald in 1842 (p. 46) and is shown diagrammatically in his figure (Pl. 1, fig. 6); but this feature was not noted in the brief description of 1840 ("Aestchen erheben sich senkrecht und steigen regelmässig an " 1840a, p. 207) and it may be noted that the specimens regarded as syntypes are labelled as coming from Reval (=Tallinn), a locality not mentioned by Eichwald in 1840. In 1840, he refers only to Baltischport (=Paldiski), Odinsholm (=Osmussaar) and Zarskoje (25 Km south of Leningrad); in 1842 the general locality " Esthland " (and " Ostgothland ") is cited, and Reval is mentioned by name in 1854, 1855 and 1860. Thus it seems possible that although these specimens are labelled in Eichwald's handwriting they may not represent his original syntypes. It is also known that a form conspecific with Kjerulf's *D. graptolithinum* occurs in Estonia—indeed Obut has so identified one of the poorly preserved syntypes (1/28b)—and the identity has been confirmed in Bulman 1966b. This is, moreover, the only form in collections available to the writer in British museums.

6. Assuming, however, that Obut's claim is correct, a strict application of the Rules of Nomenclature would result in the transference of the name *flabelliforme* to the stratigraphically and geographically more restricted subspecies *norvegicum* Kjerulf and the revival of Kjerulf's name *graptolithinum* for what has hitherto been termed *flabelliforme*. The position is rendered more complex for those who, unlike Obut, continue to regard such forms as *anglicum*, *bryograptoides desmograptoides*, *famatinense*, *multithecatum*, *norvegicum*, *parabola*, *ruedemanni sociale* and *tarijense* as subspecies of the central form *flabelliforme*.

7. Stratigraphically and palaeontologically, great confusion would result from this change in use. The *Dictyonema flabelliforme* Zone, based on the concept of *D. flabelliforme* outlined in paragraph 2 above, has been recognized in

Northwest Europe (Norway, Sweden, Estonia, Bornholm, Belgium and Britain), in North America (New York State, British Columbia, New Brunswick, Nova Scotia, Newfoundland), South America (Argentina, Bolivia) and North Africa (Sahara, Morocco) and the term has been widely used in geological literature during the past century. Some of the subspecies listed above are probably geographical subspecies, but others appear to have a more restricted stratigraphical range and a subzonal value. Among these is the subspecies *norvegicum*, only known from Norway, Sweden, Estonia and more doubtfully from Britain, New Brunswick and Morocco.

8. Accordingly, application is here made for the conservation of the name *Dictyonema flabelliforme* (Eichwald), in the currently accepted sense, by designation under the plenary powers of the Commission of a neotype outside Article 75.

9. Such action would not only avoid serious confusion, but would maintain the association of Eichwald's name with the " central form " (*forma typica*) of his species *flabelliforme*, and Kjerulf's name with the subspecies *norvegicum* with which it has so long been connected. The name *D. graptolithinum* Kjerulf appears never to have been used in geological literature between Kjerulf's proposal of it in 1865 and Obut's revival of it in 1953.

10. In 1966b, I have proposed as neotype for *Dictyonema flabelliforme* (Eichwald) the specimen Q 1392 (British Museum (Natural History)) from the *Dictyonema* Shale A3 near Pakerort, north of Paldiski, Estonia, and now seek the approval of the Commission. In 1966a, I suggested (p. 292) that the rhabdosome shown in the lower part of specimen 20006 (Pal. Mus. Oslo) from Tøyen, near Oslo, could appropriately be designated the lectotype of *Dictyonema norvegicum* Kjerulf and now formally propose this.

11. The International Commission is therefore asked:

(1) to use its plenary powers to set aside the original type-material of *Gorgonia flabelliforme* Eichwald, 1840, and having done so to designate the specimen indicated in para. 10 above as neotype of that species;

(2) to place the following specific names on the Official List of Specific Names in Zoology:

(a) *flabelliforme* Eichwald, 1840, as published in the binomen *Gorgonia flabelliforme*, as interpreted by the neotype designated under the plenary powers in (1) above;

(b) *norvegicum* Kjerulf, 1865, as published in the binomen *Dictyonema norvegicum*, as interpreted by the lectotype designated in para. 10 above.

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VOLUTA CITRINA GMELIN, 1791; *V. STRIGOSA* GMELIN, 1791; *V. LEUCOSTOMA* GMELIN, 1791 (GASTROPODA): PROPOSED SUPPRESSION UNDER THE PLENARY POWERS. Z.N.(S.) 1777

By Walter O. Cernohorsky (*Vatukoula, Fiji Islands*)

This communication requests the International Commission on Zoological Nomenclature to reject for the purposes of the Law of Priority, but not for those of the Law of Homonymy, three specific names in the genus *Voluta* as published by J. F. Gmelin in the *Systema Naturae*, ed. 13, 1791.

1. *Voluta citrina* Gmelin, 1791, *Syst. Nat.* (ed. 13) **1** : 3456. No. 80. The diagnosis of *V. citrina* is " V. testa turrita citrina, fasciis rufis ". The size-indication is given in the subdescription which reads " testa 2½ pollices longa "; no habitat has been cited. The cited indication is " Valent. Abh. 2, t. 2, f. 12 ".

Gmelin's description and subdescription refer only to the colour and size of the species, and the cited Valentyn figure (1773, *Abhandlung von Schnecken, Muscheln und Seegewächsen. Anhang zu Everhard Rumphius Amboinsche Raritatenkammer*, Vienna) depicts the species currently known as *Vexillum regina* (Sowerby, 1828) [Family Mitridae].

Gmelin's specific name is available, but has not been repeated in either primary or secondary literature on the subject since the date of description. For this reason a rejection as a *nomen oblitum* is recommended.

2. *Voluta strigosa* Gmelin, 1791, *Syst. Nat.* (ed. 13) **1** : 3456. No. 83. The diagnosis of *V. strigosa* is " V. testa turrita cinerea rubro striata: spira glaberrima, anfractibus tumidiusculis ". One indication is given " Argenv. Conch. t. 9. f. V."; no habitat has been cited.

This species of the family Mitridae has been generally confused with either *Vexillum sanguisugum* (Linnaeus, 1758) or *Mitra stigmataria* Lamarck, 1811. Dautzenberg & Bouge (1923, *Journal Conchyl.*, **67** (2) : 184) correctly separated the species from *Vexillum sanguisugum* (Linnaeus) under the varietal name *transpositum*. Dautzenberg (1935, *Mém. Mus. Roy. Hist. Nat.*, **2** (17) : 145) listed the figure of Argenville's " Buccin rayé de rouge " (1742, *L'Histoire naturelle ... La lithologie et la Conchyliologie*, Paris) as an indication for *Vexillum transpositum;* the authors obviously overlooked Gmelin's binominal validation and description of Argenville's figure.

Gmelin's specific name is available, but has remained unused since the date of description. A rejection as a *nomen oblitum* is therefore recommended.

3. *Voluta leucostoma* Gmelin, 1791, *Syst. Nat.* (ed. 13) **1** : 3457. No. 88. The diagnosis for *V. leucostoma* is given as " V. testa turrita cancellata spadicea alboque varia: maculis undatis fuscis, apertura ochroleuca ". The indication is " Knorr Vergn. 4. t. 11. f. 3 "; no habitat is cited.

Gmelin's description mentions the salient features of this species, e.g. the dark brown (often purplish-black) and white spots of the spiral ridges and the golden-yellow aperture. The cited figure from Knorr (1757–72, *Vergnügen der Augen und des Gemüths ... Sammlung von Muscheln ...* &c., Nuremberg) is a good representation of the species currently known as *Neocancilla papilio*

(Link, 1807) [Family Mitridae]. Gmelin's description of *Voluta leucostoma* combined with the good figure from Knorr shows it to be the same species as Link's *Voluta papilio*.

Menke (1830, *Synopsis methodica molluscorum . . . in Museo Menkeano adservantur*, Pyrmont, p. 85), appears to be the last author to have mentioned *Voluta leucostoma* (as a synonym of *Mitra scabriuscula* Lamarck, 1811 = *Voluta papilio* Link). Gmelin's specific name is available, but has not been used in either primary or secondary literature on the subject since 1830. A rejection of the name *Voluta leucostoma* as a *nomen oblitum* is recommended.

I herewith submit to the International Commission the proposal that it should:

(1) use its plenary powers to suppress, for the purposes of the Law of Priority but not for those of the Law of Homonymy, the following specific names, all of which are *nomina oblita*:
   (a) *citrina* Gmelin, 1791, as published in the combination *Voluta citrina;*
   (b) *strigosa* Gmelin, 1791, as published in the combination *Voluta strigosa;*
   (c) *leucostoma* Gmelin, 1791, as published in the combination *Voluta leucostoma;*

(2) place on the Official Index of Rejected and Invalid Specific Names in Zoology the following names, as suppressed under the plenary powers in (1) above:
   (a) *citrina* Gmelin (1791, *Syst. Nat.* (ed. 13) **1** : 3456) as published in the combination *Voluta citrina*;
   (b) *strigosa* Gmelin (1791, *Syst. Nat.* (ed. 13) **1** : 3456) as published in the combination *Voluta strigosa*;
   (c) *leucostoma* Gmelin (1791, *Syst. Nat.* (ed. 13) **1** : 3457) as published in the combination *Voluta leucostoma.*

DIDERMOCERUS BROOKES, 1828, *v.* *DICERORHINUS* GLOGER, 1841, (MAMMALIA: RHINOCEROTIDAE), AND THE VALIDITY OF *A CATALOGUE OF THE ANATOMICAL AND ZOOLOGICAL MUSEUM OF JOSHUA BROOKES*, 1828. Z.N.(S.) 1779

By Patrick J. Boylan (*Kingston upon Hull Museums, High Street, Hull, England*)

The purpose of this application is to request the Commission to determine whether the name *Didermocerus* Brookes, 1828, (*A Catalogue of the Anatomical and Zoological Museum of Joshua Brookes* . . . : 75), or the name *Dicerorhinus* Gloger, 1841, (*Handbuch Naturgesch.* : 125), is to be used for the recent and fossil rhinoceros genus in question. In doing so, it will be necessary to consider whether *Didermocerus* Brookes was validly published.

2. Since *Didermocerus* and *Dicerorhinus* share the same type species: *Rhinoceros sumatrensis* Fischer, 1814, (*Zoogn.* **3** : 301), they are clearly objective synonyms, although Gloger incorrectly attributed the authorship of *Rhinoceros sumatrensis* to Cuvier—an understandable mistake. During the 19th century, most authors referred all rhinoceroses to the genus *Rhinoceros* Linnaeus, 1758, but in the present century the junior synonym *Dicerorhinus* Gloger has frequently been used both for the extant *Rhinoceros sumatrensis* Fischer, and for a number of stratigraphically important fossil species.

3. In 1945, G. G. Simpson (*Bull. Amer. Nat. Hist.* 85) rejected the prior name of *Didermocerus* largely on the grounds of disuse, saying (p. 142): " The first name applied to the genus was *Didermocerus*, but this was never used and can reasonably be left in desuetude on the convenient, if somewhat sophisticated grounds that its appearance in a sales catalogue was not publication . . .". However, Simpson was not entirely consistent since at the same time he accepted the name *Acinonyx* Brookes (Mammalia: Felidae) which Brookes proposed in the same work. (If the present International Code had been in use at the time, Simpson could reasonably have asked for the suppression of *Didermocerus* as a *nomen oblitum*.) Ellerman & Morrison-Scott, 1951, (*Checklist of Palaearctic & Indian Mammals*, 1758–1946), rejected Simpson's claim that *Didermocerus* was not validly published, saying (p. 339): " Simpson (1945) calls this *Dicerorhinus*, and suggests, somewhat half-heartedly, that the name *Didermocerus* may conveniently be dropped, on the ground of its publication in a sale catalogue. This in itself is no bar to " publication " within the meaning of the *Règles*, and the catalogue was on sale to the public for half a crown. Moreover, Simpson adopts *Acinonyx* which appears in the same publication." As a result of its use in Ellerman & Morrison-Scott's authoritative *Checklist* the name *Didermocerus* has been, to some extent, restored to use so it cannot now be regarded as a *nomen oblitum*. However, the majority of zoologists and nearly all palaeontologists have continued to use *Dicerorhinus*.

4. The Commission could stabilize the position in any one of three ways. Following Ellerman & Morrison-Scott, the Commission could accept Brookes' *Catalogue* as a genuine publication within the meaning of the Code. This would, however, cause some disturbance since *Didermocerus* is still used far less

frequently than *Dicerorhinus*, although the use of *Didermocerus* is now increasing. Secondly, the Commission could accept Simpson's argument, and regard Brookes' *Catalogue* as invalid for purposes of nomenclature. It might then be necessary for the well-established name *Acinonyx* Brookes to be validated by the use of the plenary powers. A less logical third alternative would be to explicitly or implicitly accept Brookes' *Catalogue*, but suppress *Didermocerus* under plenary powers. In my view, this alternative has little to commend it except that it would stabilize the prevailing usage without disturbing *Acinonyx*.

5. The Commission is therefore requested to consider three alternative sets of proposals, as follows.

Alternative A

The Commission is requested:

(1) to place the following work on the Official List of Works Approved as Available for Zoological Nomenclature:
J. Brookes, 1828: *A Catalogue of the Anatomical and Zoological Museum of Joshua Brookes* . . . (etc.);

(2) to place the generic name *Didermocerus* Brookes, 1828 (gender : masculine), type-species, by monotypy, *Rhinoceros sumatrensis* Fischer, 1814, on the Official List of Generic Names in Zoology;

(3) to place the generic name *Dicerorhinus* Gloger, 1841, on the Official Index of Rejected and Invalid Generic Names in Zoology, as a junior objective synonym of *Didermocerus* Brookes, 1828.

Alternative B

The Commission is requested:

(1) to place the following work on the Official Index of Rejected and Invalid Works in Zoological Nomenclature:
J. Brookes, 1828: *A Catalogue of the Anatomical and Zoological Museum of Joshua Brookes* . . . (etc.);

(2) to place the generic name *Dicerorhinus* Gloger, 1841, (gender : masculine), type species by monotypy, *Rhinoceros sumatrensis* "Cuvier" = Fischer, 1814, on the Official List of Generic Names in Zoology;

(3) to place *Didermocerus* Brookes, 1828 on the Official Index of Rejected and Invalid Generic Names in Zoology, on the ground that it was published in a Work declared to be unavailable for purposes of nomenclature under (1) above.

Alternative C

The Commission is requested:

(1) to use its plenary powers to suppress the generic name *Didermocerus* Brookes, 1828, for the purposes of the Law of Priority but not for the purposes of the Law of Homonymy;

(2) to place the generic name *Dicerorhinus* Gloger, 1841, (gender : masculine), type-species by monotypy, *Rhinoceros sumatrensis* " Cuvier " = Fischer, 1814, on the Official List of Generic Names in Zoology;

(3) to place the generic name *Didermocerus* Brookes, 1828, (as suppressed under the plenary powers in (1) above) on the Official Index of Rejected and Invalid Generic Names in Zoology.

TETRAMERES CREPLIN 1846 (NEMATODA: SPIRURIDA): PROPOSED VALIDATION UNDER THE PLENARY POWERS. Z.N.(S.) 1783

By M. B. Chitwood (*U.S. Department of Agriculture, Beltsville, Maryland, U.S.A.*)

The International Commission on Zoological Nomenclature is asked (1) to use its plenary powers to place the generic name *Tetrameres* Creplin, 1846, on the list of valid names, and (2) to place the name *Tropisurus* Diesing, 1835, on the list of rejected names.

The chronology of the case is as follows:

In 1835, Diesing erected the genus *Tropisurus* for nematodes collected from the proventriculus of *Cathartes urubu* Temm. (*Vulturis urubu* Vicell.). The specimens were collected by Natterer in Brazil. The name was not an arbitrary combination of letters as shown by Diesing's statement " so biethen der runde elastiche Körper dieses Thieres, die an dem einen Ende durch die Mundoffnung; an dem andern durch den after begränzte Nahrungshöhle und endlich das Getrenntseyn der Geschlechter, hinnreichende Merkmahle dar, um ihr in dem Systeme von Rudolphi einen Platz in der Ordnung der Rundwürmer (Nematoidea) anzuweisen. Die Charaktere durch welche sich unsere Gattung von allen übrigen derselben Ordnung sallsam unterscheidet, so wie die am meisten hervorspringenden Kennzuchen der einzelnen Art, die mir bekannt geworden ist, lassen sich im Nachstehenden zusammen fassen . . . . . "

" *Tropisurus paradoxus*. Individua feminea subglobosa diametro trium ad quatuor linearum, utrinque in acumen attenuata, per totam longitudinem fasciis quatuor sese decussantibus mumita, transversim zonis numerosissimis annulata, sordide brunescentia, singula nunc solitaria, nunc cum mare singulo intra vesicam cellulosam hyalinam cortenta, interdum libera.

" Mares filiformes, quinque ad sex lineas longi et $\frac{1}{3}$ lati albi, arcuatim curvati, transversim subtilissime annulati, singuli cum femina singula intra vesicam inclusi."

Wiegmann in the same year (1835) and Agassiz (1846) pointed out that the name was incorrectly derived and should be *Tropidurus*.

In 1839, Creplin pointed out that *Tropidurus* was preoccupied by *Tropidurus* Neuw., 1824, reptile.

In 1846, Creplin described *Tetrameres haemochrous* from the proventriculus of another bird.

Diesing, 1851, described *Tropidocerca*, listing " *Tropisurus* Diesing, *Spiroptera* Mehlis and *Tetrameres* Creplin " as synonyms. He designated *T. paradoxa*, type of *Tropisurus* as type of *Tropidocerca*.

Stiles and Baker, 1930, in answer to inquiries as to the correct name for this nematode, published the following:

" A study of the original documents demonstrates that Wiegmann, 1835, and Agassiz, 1846, were entirely right in emending *Tropisurus* Diesing, 1835, to *Tropidurus*. The name *Tropidurus* is, however, preoccupied by *Tropidurus* Neuw., 1824, reptile. Accordingly, it is a dead homonym. Had *Tropisurus* been proposed as an arbitrary combination of letters it could stand in spite of

Tropidurus Neuw., 1824, but it was proposed with definite citation and derivation and, therefore, comes under Article 19 of the International Rules. *Tetrameres* Creplin, 1846, appears to be the oldest valid name for the nematode in question. It is not clear why Baylis and Daubney, 1926, revert to *Tropisurus*." (Baylis, 1939, reluctantly accepted *Tetrameres* Creplin, 1846.)

Travassos, 1914, established the family Tetrameridae based on *Tetrameres* Creplin, 1846, and the genus *Microtetrameres* Trav., 1915, based on a variation of the genus *Tetrameres*.

Practically all parasitologists have followed this usage. Yorke and Maplestone, 1926, in their classic, *Nematode Parasites of Vertebrates*, entrenched the name in usage.

Baylis and Daubney, the same year, in their *Genera and Species of Nematodes*, reverted to the use of *Tropisurus* Diesing, 1835, but in 1939 Baylis accepted the fact that strict application of the rules invalidated *Tropisurus*.

Thus, the name *Tetrameres* Creplin, 1846, was used without question until Yamaguti, 1961, in his *Systema Helminthum*, *The Nematodes of Vertebrates*, revived the name *Tropisurus* Diesing 1835. This has caused confusion and many inquiries as to the correctness of his action.

Under the present Code the correct name for this genus is *Tropisurus*, since an original spelling is to be retained in spite of an error in transliteration (Art. 32a). However, in view of the statements of Wiegmann, Agassiz, Travassos, and Stiles and Baker, the petitioner asks that the name *Tetrameres* Creplin be validated under the plenary powers before a confusing array of new combinations are offered. The genus is active in the sense that several new species have been described within a year.

The International Commission is therefore requested:

(1) to use its plenary powers to suppress the generic name *Tropisurus* Diesing, 1835, for the purposes of the Law of Priority but not for those of the Law of Homonymy;

(2) to place the generic name *Tetrameres* Creplin, 1846 (gender : masculine), type-species, by monotypy, *Tetrameres haemochrous* Creplin, 1846 on the Official List of Generic Names in Zoology;

(3) to place the specific name *haemochrous* Creplin, 1846, as published in the binomen *Tetrameres haemochrous* (type-species of *Tetrameres* Creplin, 1846) on the Official List of Specific Names in Zoology;

(4) to place the generic name *Tropisurus* Diesing, 1835 (as suppressed under the plenary powers in (1) above), on the Official Index of Rejected and Invalid Generic Names in Zoology.

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STERNA TSCHEGRAVA LEPECHIN, " 1770," AND *MOTACILLA PLESCHANKA* LEPECHIN, " 1770," VERSUS *STERNA CASPIA* PALLAS, " 1770," AND *MOTACILLA LEUCOMELA* PALLAS, " 1770," (AVES). PROPOSED USE OF THE PLENARY POWERS TO END THE CONFLICT CREATED BY THESE NAMES. Z.N.(S.) 1784

By G. P. Dementiev and N. A. Gladkov (*Zoological Museum of the University, Moscow, U.S.S.R.*), A. I. Ivanov and L. A. Portenko (*Zoological Institute of the Academy of Sciences of the U.S.S.R., Leningrad, U.S.S.R.*), and Charles Vaurie (*The American Museum of Natural History, New York, U.S.A.*).

Lepechin (" 1770," but probably 1771 or later), *Novi Commentarii Acad. Sci. Imp. Petropolitanae* **14** (1) : 44, 498–504) described five common birds from Russia. Three of these birds were described also by Pallas in the same volume of the *Novi Commentarii*, appearing first as *nomina nuda* on page 49 of the " Summarium," but with a full description later in the body of the text (pp. 582–592). Duplicate plates were also furnished by Lepechin and Pallas.

Three of the names of Lepechin are obsolete and do not concern us, but the parallel existence of *tschegrava* and *caspia* (now allocated to the genus *Hydroprogne*), and of *pleschanka* and *leucomela* (now allocated to the genus *Oenanthe*), has created conflict in the nomenclature. This conflict does not exist in the modern Russian literature where the two names of Lepechin are not challenged and are in universal use. The Caspian Tern, however, is virtually cosmopolitan and some works, chiefly by British and American authors, use *caspia* rather than *tschegrava*. The use of *tschegrava* is far from being restricted, however, to the Russian literature, and we may list the basic works of Hartert (1921, *Die Vögel der paläarktischen Fauna*), Peters (1934, *Check-list of birds of the world*, vol. 2), Hellmayr and Conover (1948, *Catalogue of birds of the Americas*, pt. 1, no. 3), and Vaurie (1965, *The birds of the Palearctic fauna, non-passeriformes*), and also the check lists of some European and Asiatic countries (Sweden, Czechoslovakia, Japan, and China). Among the authors who use *caspia* are Ridgway (1919, *Birds of North and Middle America*, vol. 8), Sclater (1924–1930, *Systema Avium Aethiopicarum*), Mathews (1927–1930, *Systema Avium Australasianarum*), Witherby and others (1941, *The handbook of British birds*, vol. 5), and Ripley (1961, *Synopsis of the birds of India and Pakistan*); *caspia* is used also by the check list of the birds of Great Britain and Ireland, and by the fourth (1931) and fifth (1957) editions of the check list of the American Ornithologists' Union, the earlier editions of this last check list using *tschegrava*. Thus, usage is perhaps about equally divided on a world-wide basis.

The Pied Wheatear, on the other hand, is restricted to the Palearctic region, a distribution which diminishes the possibility of nomenclatural conflict. Nevertheless, the literature which concerns this species is abundant because the bird is common, and, with few exceptions, uses the name *pleschanka*. The most important exception is *The handbook of British birds* (1940, vol. 2) which uses *leucomela*. Ripley, who has used *caspia* for the tern, uses *pleschanka* for the wheatear in his *Synopsis of the birds of India and Pakistan*. The *Check-list*

of birds of the world (1964, vol. 10) also explicitly uses *pleschanka* rather than *leucomela*.

Our application is prompted by a communication of Amadon (1966, *Ibis* : 424) discussing the scientific name of the tern, that was answered by Vaurie (1966, *Ibis* : 633).

Amadon contends that *caspia* must replace *tschegrava* on the grounds that Gmelin (1789, *Systema Naturae* : 603-604), acting as " first reviser," selected *caspia*, and that Lepechin was not consistently binominal in the work in question. Amadon did not discuss the name of the wheatear, but his contention that Gmelin is the " first reviser," applies also to this species, because Gmelin on page 974 of the same publication, selected *leucomela* rather than *pleschanka*.

Vaurie contends, in his reply to Amadon, that the " first reviser " principle cannot be invoked, because the dates of publication are not certain, and that the names of Lepechin are available because they meet the provisions of Article 11c (ii) of the International Code.

The names of Lepechin can be rejected by invoking the " first reviser " principle only if it is certain that his communication and that of Pallas were published simultaneously. Volume 14, part 1, of the *Novi Commentarii* states that Lepechin presented his communication on March 15, 1770, and that Pallas presented his on April 16, 1770, but whether or not the two papers were actually printed or issued simultaneously is not known and cannot be established incontrovertibly after nearly 200 years have elapsed. Our experience with the very early Russian publications leads us to this conclusion, and we remark that even the specified date on the title page of the entire volume (" 1770 ") cannot be assumed to be correct as some bibliographers state that this volume was published later, possibly in 1771.

Lepechin was not consistently binominal in the body of the text of the paper in question, but, nevertheless, his names are valid because they meet the provisions of Article 11c (ii) of the International Code which governs names published in an index before 1931 by an author who is not binominal in the body of the text. Volume 14, part 1, of the *Novi Commentarii* does not have an index in the modern sense, but the index is replaced by a " Summarium " where Lepechin's names appear on page 44 accompanied by a description and a bibliographical reference to the body of the text, the latter referring explicitly to the plates where the birds named are depicted.

We would like to stress also that to reject Lepechin's names on the ground that he was not consistently binominal in the work in question could set a dangerous precedent whereby the names of some old authors who are not consistently binominal could be challenged and perhaps rejected. This was emphasized by Hartert (1921, *Die Vögel der paläarktischen Fauna* : 1692, footnote), who names Boddaert among others. The latter has proposed names for many common species in his work (1783, *Table des planches enluminéez . . .*) that are not challenged even though this work is not consistently binominal. The early authors must be judged by the same standard which allows for no discrimination.

A conflict in the nomenclature is caused by the parallel existence of the names of Lepechin and Pallas. We therefore request the International Commission to settle it by exercising its plenary powers as follows:

(1) to place the specific names *tschegrava* Lepechin, " 1770," as published in the binomen *Sterna tschegrava*, and *pleschanka* Lepechin, " 1770," as published in the binomen *Motacilla pleschanka*, on the Official List of Specific Names in Zoology.

(2) to place the specific names *caspia* Pallas, " 1770," as published in the the binomen *Sterna caspia*, and *leucomela* Pallas, " 1770, "as published in the binomen *Motacilla leucomela*, on the Official Index of Rejected and Invalid Specific Names in Zoology, despite the action of Gmelin (1789) acting as first reviser, in the event that the International Commission should consider that the principle of the first reviser applies in the case of the names of Lepechin and Pallas.

We request further that the International Commission consider the merits of each pair of names separately, because the conflict is serious only in the case of *tschegrava* and *caspia*, but not in the case of *pleschanka* and *leucomela* where stability and universality is certainly best promoted by validating *pleschanka*.

POLYXENUS LATREILLE, [1802–1803] (DIPLOPODA): PROPOSED VALIDATION OF EMENDATION FROM *POLLYXENUS*. Z.N.(S.) 1785

By Otto Kraus (*Natur-Museum und Forschungs-Institut Senckenberg, Frankfurt am Main, Germany*)

The generic name *Polyxenus* is very well-known to specialists and also to a considerable extent in general zoology; it is consistently used in textbooks as the name of the most important genus of the subclass Pselaphognatha. There is also a currently used family-group name, Polyxenidae, which has been based on *Polyxenus*. The most common European species, *P. lagurus*, has been the object of several important biological studies (cf. Schömann, 1956; Seifert, 1966).

But under the provisions of the Code *Polyxenus* proves to be an unjustified emendation of a name originally published in the form *Pollyxenus* by Latreille, [1802–1803]. It would be highly unsuitable to change the spelling of such an important name, as it is universally established, solely on the basis of technical provisions of the Code. The details are set out below.

2. The name *Pollyxenus* was first introduced into literature by Latreille, [1802–1803] (*Hist. nat. Crust. Ins.* **3** : 45). In 1820 Goldfuss for the first time published the spelling *Polyxenus* (*Handbuch d. Zoologie* **1** : 199). During the following decades of years, original as well as subsequent spelling were used by several authors. When Latzel published his famous " Die Myriopoden der österreichisch-ungarischen Monarchie " in 1884, he expressly preferred the form *Polyxenus* and explained his reasons (: 77); according to the provisions of the Code (Art. 33a) it was Latzel who for the first time formally established the status of an emendation for the version *Polyxenus*.

In the following decades of years, most subsequent authors followed him; some others, as I am informed by Professor Condé (Nancy), still continued to use the original spelling *Pollyxenus*, viz. Louis (1887), Chalande (1888, 1908, 1922[1]), Porat (1889), and Brölemann (1895). In later works *Pollyxenus* is no longer used at all. For the reasons explained in footnote (1) we may set aside the citation by Chalande in 1922 and conclude that the original spelling *Pollyxenus* has been forgotten for more than 58 years.

3. In the interests of stability and continuity of nomenclature and as already explained above it seems necessary to preserve established usage in this case. The easiest way to achieve this would be to suppress *Pollyxenus* Latreille, [1802–1803], in favour of *Polyxenus* Latzel, 1884. But Latreille has been consistently cited as author also of the emendation *Polyxenus*, so that such an action seems inappropriate. Therefore it is proposed to suppress *Pollyxenus* Latreille, [1802–1803], as an incorrect original spelling; at the same time the Commission is asked to validate the currently used spelling *Polyxenus* with same author and date.

[1] This citation does not refer to an original publication but to a mere reprint of the 1908 paper.

4. A family-group name Polyxenidae was based on the generic name in its form *Polyxenus* by Gray & Jones (1842, *in* Todd, *Cyclopaedia of Anat. and Physiol.* 3 : 546). But there also exists a contemporaneous version Pollyxénites Lucas, 1842 (Crustacés, Arachnides et Myriapodes, *in* : *Hist. natur. Anim. articul.* : 518), a name which perhaps should be regarded a mere vernacular generic plural which does not have the rank of a family-group name published with incorrect suffix. As there is no doubt that Polyxenidae, with Gray & Jones as authors, should also be maintained as it is firmly established for more than hundred years, it seems necessary to place Pollyxénites Lucas, 1842, on the Official Index of Family-Group Names.

5. The International Commission is therefore asked:

(1) to use its plenary powers to validate the emendation to *Polyxenus* of the generic name *Pollyxenus* Latreille, [1802–1803];

(2) to place the generic name *Polyxenus* (emend. of *Pollyxenus*) Latreille, [1802–1803], (gender : masculine), type-species, by monotypy, *Scolopendra lagura* Linnaeus, 1758, on the Official List of Generic Names in Zoology;

(3) to place the specific name *lagura* Linnaeus, 1758, as published in the binomen *Scolopendra lagura* (type-species of *Polyxenus* Latreille, [1802–1803]) on the Official List of Specific Names in Zoology;

(4) to place the family-group name Polyxenidae Gray & Jones, 1842, (type-genus *Polyxenus* Latreille, [1802–1803]) on the Official List of Family-Group Names in Zoology;

(5) to place the generic name *Pollyxenus* Latreille, [1802–1803] (an incorrect original spelling of *Polyxenus* Latreille, [1802–1803]) on the Official Index of Generic Names in Zoology;

(6) to place Pollyxénites Lucas, 1842, on the Official Index of Family-Group names in Zoology; (rejected as a mere vernacular generic plural and a synonym of Polyxenidae Gray & Jones, 1842.)

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The Official Organ of

THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

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BULLETIN OF ZOOLOGICAL NOMENCLATURE

Volume 24, Part 2 (pp. 65–128) 27*th April* 1967

NOTICE OF VACANCIES ON THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

In accordance with the By-laws of the Commission notice is hereby given that four vacancies have arisen in the membership of the International Commission. These vacancies are caused by the retirement of Commissioners N. D. Riley (U.K.) and E. M. Hering (Germany) and the decease of Commissioners N. S. Borchsenius (U.S.S.R.) and A. H. Miller (U.S.A.).

The Commission now invites, from representatives of bodies concerned with zoology, suggestions for nominations to fill these vacancies. The names of candidates should be submitted as soon as possible to the Secretary, International Commission on Zoological Nomenclature, c/o British Museum (Natural History), Cromwell Road, London, S.W.7, England.

NOTICES

(a) *Date of Commencement of Voting.*—In normal circumstances the Commission starts to vote on applications published in the *Bulletin of Zoological Nomenclature* six months after the publication of each application. Any zoologist who wishes to comment on any of the applications in the present part is invited to send his contribution, in duplicate, to the Secretariat of the Commission as quickly as possible, and in any case in time to reach the Secretariat before the close of the six-month period.

(b) *Possible use of the Plenary Powers.*—The possible use by the Commission of its plenary powers is involved in the following applications published in the present part of the *Bulletin:*

(1) Designation of a neotype for *Prototomus viverrinus* Cope, 1874; grant of priority to PALAEONICTIDAE Osborn, 1892, over AMBLOCTONIDAE Cope, 1877, and AMBLYCTONIDAE Cope, 1880 (Mammalia). Z.N.(S.) 1631.

(2) Suppression of *Nematus leachii* Dahlbom, 1835 (Insecta, Hymenoptera). Z.N.(S.) 1778.

(3) Validation of *Ripidorhynchus* Sartenaer, 1966 (Brachiopoda). Z.N.(S.) 1781.

(4) Suppression of eight generic and forty-four specific names; validation of *Thyonidium pellucidum* Düben and Koren, 1845; designation of a type-species for *Thyonidium* Düben and Koren, 1845 (Holothurioidea). Z.N.(S.) 1782.

(5) Designation of type-species for *Crioceris* Müller, 1764 and *Lema* Fabricius, 1798 (Insecta, Coleoptera). Z.N.(S.) 1786.

(6) Validation of *Receptaculites* Deshayes, 1828 (Receptaculida) Z.N.(S.) 1787.

(7) Designation of a type-species for *Cryphalus* Erichson, 1836 (Insecta, Coleoptera). Z.N.(S.) 1788.

(8) Suppression of *Crobylophorus* Krøyer, 1852 and *Crobylophorus chimaerae* Krøyer, 1852 (Cestoda). Z.N.(S.) 1790.

c/o British Museum (Natural History),
Cromwell Road,
London, S.W.7, England.
March 1967.

W. E. CHINA
Assistant Secretary,
International Commission on
Zoological Nomenclature

COMMENT ON THE PROPOSED PRESERVATION OF *PAN* FROM OKEN, 1816. Z.N.(S.) 482

(see volume 22, pages 230–232, volume 23, pages 67–70)

By Ernst Mayr (*Museum of Comparative Zoology, Harvard University, Cambridge, Mass., U.S.A.*)

I strongly support the application of Morrison-Scott to preserve the name *Pan* Oken, 1816. As early as 1914 this name has been called a "Code name" in Opinions of the Commission. It is the name almost universally used since that time either for the champanzee or for the African apes. To say, as Hershkovitz does, that there is no need for stability of scientific names in this area because "few anthropologists, primatologists, zookeepers, behaviourists, biomedical and biochemical investigators and others using non-human primates in research . . . , are zoologists" is an argument the force of which I fail to comprehend. All these people have been using the name *Pan* for the last couple of generations and there is no conceivable advantage in changing it at this late date. Furthermore, as correctly pointed out by Morrison-Scott, there is a strong trend to place both chimpanzee and gorilla in the same genus and the neutral name *Pan* is certainly more suitable for this polytypic genus than the name *Chimpanzee*. Few scientific names have been as stable as has been the name *Pan* over the last 50 years and to change it would expose taxonomy to precisely the kind of reproaches of irresponsibility and failure to understand the information retrieval significance of nomenclature which the more responsible taxonomists have been trying to refute.

COMMENTS ON THE PROPOSED DESIGNATION OF A NEOTYPE FOR *OPOPSITTA MARSHALLI* IREDALE, 1946. Z.N.(S.) 1773

(see volume 23, pages 283–284)

By G. F. Mees (*Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands*)

I oppose this proposal as it does not meet with any of the requirements under which a neotype can be established. With reference to Article 75 of the Code*, I want to point out in particular that:

1. The original type material, including the holotype, does still exist.
2. There does not appear to be any uncertainty about the identity of the type material, or about its type locality.
3. The proposer fails to mention any systematic or nomenclatural advantage that would accrue from setting aside the holotype and having a neotype, and from his own remarks it is clear that there is none.
4. There does not appear to be any need for placing *Opopsitta marshalli* on the Official List of Specific Names in Zoology as its priority in the population it represents is uncontested, though it may be, by subjective judgment, a synonym of *Opopsitta diophthalma aruensis* (Schlegel, 1874), which has more than seventy years priority over *O. marshalli* Iredale, 1946.
5. If a neotype is established on such slender grounds, the Commission would go against its own Rules, and moreover would create a dangerous precedent.

By Curtis W. Sabrosky (*Entomology Research Division, Agr. Res. Serv., U.S. Department of Agriculture, Washington, D.C., U.S.A.*)

Although not an ornithologist, I wish to register opposition on general grounds to the designation of a neotype for *Opopsitta marshalli*, as proposed by Forshaw.

2. Technically, because the holotype is still in existence, a neotype is not justified under Article 75. Nor do the circumstances meet the requirement of " exceptional circumstances when a neotype is necessary in the interests of stability of nomenclature ".

3. Interpretation of the taxonomic status of *marshalli* really depended on the collection of adequate material from the vicinity of the type locality, for study and comparison with *aruensis* from the Aru Islands. The conclusions were derived from that material, they could have been reached in the absence of any original material at all, and they were arrived at even though the holotype and other original material were in poor condition. The holotype, even though damaged, continues to function as a name-bearer. No neotype is necessary.

4. The stringent requirements of Article 75 were intended to discourage the designation of neotypes except in really serious cases for which a neotype appeared to serve a real purpose in avoiding confusion. The present instance, with a definite type-locality known and with original type material still in existence, does not meet the requirements and does not, in my opinion, justify plenary action to set aside the holotype. Such action is an extreme step that should only be taken in cases of real urgency and serious confusion.

* Forshaw requested use of plenary powers to designate a neotype and therefore the requirements of Art. 75 would be set aside (Editor)

FURTHER COMMENT ON THE TYPE-SPECIES OF *PHASIA*

(see volume 22, pages 243–245, volume 23, pages 9–11, 134–144, 196–197)

By Curtis W. Sabrosky (Z.N.(S.) 1706)

Inasmuch as Dupuis and I are in general agreement, it is almost academic to comment further. However, as Dupuis has already noted, if the Commission should agree with us that the type-species of *Phasia* is *subcoleoptrata*, they must reach some decision on how that is to be cited for the Official List. May I briefly make two comments:

1. The type-species should be cited as *Conops subcoleoptrata* Linnaeus, not as " *Thereva subcoleoptrata* (F. 1798) " as proposed by Dupuis. There is no nominal species *subcoleoptrata* Fabricius, either as a new species or as a new name. Fabricius' citations refer back to Linnaeus, 1767. In both 1805 and 1810, Latreille referred *subcoleoptrata* to Fabricius, but this was often done at that period, and the author's name is now corrected. It is not claimed that a misidentification was involved; rather, both Dupuis and I maintain that Latreille and Fabricius both had the correct *subcoleoptrata*.

2. The different interpretations of type-fixation rest simply upon the question of whether Latreille (1804) is to be interpreted as including the six species of *Thereva* from Fabricius (1798) by his statement " les Thérèves de M. Fab. " Contrary to Dupuis *Bulletin* **23** : 135, footnote 2), my interpretation rests on Article 69a(i): " the ' originally included species ' comprise only those actually *cited by name* in the newly established genus " [italics mine]. In publishing *Phasia*, Latreille (1804) cited no nominal species by name; consequently, I concluded that *Phasia* was published without originally included nominal species. Latreille (1805) did include one species by name, and thus (Article 69a, ii, 2) fixed it as the type-species by subsequent monotypy.

FURTHER COMMENTS ON *PHASIA* LATREILLE Z.N.(S.) 1706

By Curtis W. Sabrosky (*Entomology Research Division, U.S. Department of Agriculture, Washington, D.C., U.S.A.*)

Herting (1966, *Bull. zool. Nomencl.* **23** : 196–197) has presented several criticisms of my arguments against his proposed designation of a type-species for *Phasia*. It is essential to separate fact and opinion, and to be sure that the facts are clearly understood. The paragraph numbers below correspond to those of Herting's criticism.

2. The recognition and limits of a tribe are matters of opinion. I consider the two groups as generic groups (subtribes if one wishes) in the Phasiini, and hence I have no difficulty with the tribal name. If Dupuis and Herting restrict further and recognize the two groups as separate tribes, then nomenclaturally their subfamily Phasiinae must contain a typical tribe Phasiini (International Code, Art. 37), even as a genus divided into subgenera will contain a typical (nominate) subgenus bearing the same name. Dupuis, on the other hand, adopts Alophorini for the group containing *Phasia*, apparently because *Alophora* represents *Phasia* of authors, not Latreille.

It seems to me quite illogical, as well as incorrect nomenclaturally (Code, Art. 37), to adopt *Phasia* and Phasiinae, but not Phasiini. Incidentally, the more one restricts, and the more narrowly limited the " tribe " becomes, the more one depreciates the significance of past usage. Prior to Dupuis, and in the sense of some modern authors, the tribe Phasiini included all the genera in question; hence any restriction or more limited use will be a break with most of the literature of the past at the tribal level.

3. The type-species of *Phasia* is *subcoleoptrata* Linnaeus, described from Sweden, not " *subcoleoptrata* Fabricius ". If it be considered that Latreille, author of *Phasia*,

misidentified the type-species, then the real question is what Latreille identified, not what Fabricius identified. Even if one does go back to Fabricius, one faces the fact that his basic material of *subcoleoptrata* came from Sweden from the Bosc Collection (Fabricius, 1794, *Ent. Syst.* **4** : 283), and this is consistent with *subcoleoptrata* Linnaeus, described from Upsala. Girschner's *Phasia rubra*, which Herting would recognize as type from Meigen's description of a specimen labelled " *subcoleoptrata* " in the Fabrician Collection, is not known to occur in Sweden, as far as I am aware (cf. Dupuis, 1963, *Essai monographique sur les Phasiinae*, pp. 112–113).

4. Herting suggests the possibility that Fabricius obtained " the specimen(s) present in his own collection " from Bosc. It is also possible that Fabricius returned Bosc's material to Bosc, and that the Fabrician specimen(s) referred to by Meigen came from someone else and from somewhere else in Europe, and were misidentified by Fabricius, or perhaps considered as a variation. Indeed, because *rubra* does not occur in Sweden, the Fabrician-Meigen specimen(s) must have originated elsewhere in Europe. But both Herting's suggestion and mine are speculation, and basically irrelevant to the question of the identity of *subcoleoptrata* Linnaeus, or of *subcoleoptrata* Linnaeus sensu Latreille.

5. Of course, one cannot say positively that Latreille knew the true *subcoleoptrata* of Linnaeus, but one can consider it highly probable: (1) Fabricius identified *subcoleoptrata* from Sweden (!) in the Bosc Collection; (2) there is no question whatsoever that Bosc sent much material to Fabricius for identification and description (numerous references in Fabricius to " Mus. Dom Bosc "); (3) there is no question that such material was returned to Bosc (some years ago I personally studied Fabrician types of Bosc material in the Museum at Paris; see also Horn and Kahle, 1935, " Ueber entomologische Sammlungen", *Ent. Beihefte aus Berlin-Dahlem* **2** : 71 : " Typen [of Fabricius] auch im. . . Paris (ex coll. L.A.G. Bosc)"); (4) Latreille's known close friendship with Bosc and the obvious availability of the Bosc Collection make it highly probable, even " virtually certain ", that he saw the Bosc Collection, and could have seen the *subcoleoptrata* Linnaeus of Fabricius.

I believe that Herting is swayed by the two facts that Bosc was French and that the true *subcoleoptrata* does not occur in France. Of more immediate relevance and importance are the two facts that Bosc did have material from other countries and that the *subcoleoptrata* in his collection (det. Fabricius) came from Sweden. Finally, Herting quotes a letter of April 17, 1963, from Dupuis that " *subcoleoptrata* n'existe pratiquement pas en France [which is true] et Latreille n'a travaillé que sur des textes " [which surely cannot be said with certainty]. In his most recent publication, Dupuis states " J'accorde à Sabrosky que Latreille aurait pu voir cette espèce dans la collection Bosc " (1966, *Bull. zool. Nomencl.* **23** : 136, footnote 7).

Incidentally, if Herting insists that Latreille worked only " sur des textes ", that would destroy his own previous emphasis upon the absence of *subcoloptrata* from France, and upon the Fabrician specimen seen by Meigen, because the Fabrician text shows that the *subcoleoptrata* of Fabricius in the Bosc Collection came from Sweden (" Habitat in Suecia. Mus. Dom Bosc ").

6. See preceding paragraphs. It is not proved that Latreille worked only from published texts, and Dupuis now admits that Latreille could have seen the Bosc Collection.

7. The argument of this entire paragraph is coloured by the idea that the Bosc material must have come from France. I repeat: The Bosc material identified as *subcoleoptrata* by Fabricius was from Sweden (" Habitat in Suecia ").

8. My conclusions remain opposite to those of Herting.

9. In comment on the counter propositions of Dupuis (1966, *loc. cit.*: 142), I oppose the designation of " *Thereva subcoleoptrata* (F.1798) " as the type-species of *Phasia*, because such a nominal species does not exist. Fabricius clearly cited Linnaeus as the author of *subcoleoptrata*. It would certainly be illogical to place *subcoleoptrata* Linnaeus on the Official List of Specific Names, while ignoring the Linnaean authorship in citing it as the type-species of *Phasia*.

REVISED PROPOSAL FOR DESIGNATION OF A TYPE-SPECIES FOR *PHASIA* LATREILLE. Z.N.(S.) 1706

(see volume 22, pages 243–245, volume 23, pages 9–11, 134–144, 196–197)

By Benno Herting (*Commonwealth Institute of Biological Control, European Station, Delémont, Switzerland*)

Dr. Dupuis has made a very elaborate study of the *Phasia* problem (see volume 23, pages 134–144) and has drawn attention to some important points which have not yet been taken into account.

2. The identity of *Thereva subcoleoptrata* Fabricius, which is the nominal type-species of *Phasia*, remains after all the decisive problem. Dupuis, like Sabrosky, does not consider the material seen by Meigen in Fabricius' collection as typical of *T. subcoleoptrata* Fabricius. His arguments (p. 138, chapter II A 2) are those already brought forward by Sabrosky: (1) the relevant material should be in the Bosc collection, and (2) Meigen and Fallén gave under the true *subcoleoptrata* Linné also the bibliographic references to Fabricius. I have already commented these arguments which I consider as invalid, in my reply to Dr. Sabrosky (see volume 23, page 196, paragraphs 4 and 6). The identity of the material in the Bosc collection remains unknown. Dupuis does not discuss this point because there exists no information on it. But there is also no reason to believe that the Bosc material was different from the one in Fabricius' collection (see volume 23, page 196, paragraph 7). In the case of *crassipennis*, Fabricius likewise refers to Bosc, and in this case the specimens in Fabricius' own collection were obviously conspecific with, or even part of, the type series. The *Phasia* (*Ectophasia*) species are very rare or absent in the area of Kiel where Fabricius lived, and the origin of the specimens which he had in his collection under the names *crassipennis* and *subcoleoptrata*, was most likely the Bosc collection because he refers only to this.

3. In his paragraph B 4 on page 139, Dupuis draws attention to the fact that Fabricius (1794) misidentified the unnamed picture of a *Phasia* (*Ectophasia*) *rubra* by Schaeffer (1767) as being his *Syrphus hemipterus* (*Alophora hemiptera* F.). This error of Fabricius is surprising because *A. hemiptera* is easily recognized by the long and dense red pilosity on the pleura, a character observed by Fabricius himself (see Dupuis p. 139, paragraph B 1). A picture giving only the dorsal aspect of the fly may, of course, not show this character clearly enough, and that seems to explain the error. When examining specimens of *rubra*, Fabricius should have noticed the absence of red pilosity and not have repeated the above mistake. Indeed, the specimens of *rubra* which, according to Meigen, were present in Fabricius' collection, were labelled *subcoleoptrata* and not *hemiptera*.

4. In the footnote 6 on page 136, Dupuis cites an important text of Latreille (1809, p. 345) which I did not know. " *Conops subcoleoptratus* Linnaei congener, sed a *T. subcoleoptrata* Fabricii diversus videtur, ut indicant haec Linnaei verba: . . ." This means that Latreille considered *Conops subcoleoptratus* Linné as a species different from *Thereva subcoleoptrata* Fabricius, and by designating the latter as type-species of *Phasia* intentionally excluded the Linnean species (which he did not know) from being the type. Latreille's opinion is based on the description of *subcoleoptrata* by Linné and not on comparison of material. The only author who examined material of both species, the true *subcoleoptrata* from Sweden and the so-called *subcoleoptrata* of Fabricius, was Meigen, and his statement (1824, p. 186) is the only existing information on the identity of the type species of *Phasia*.

5. I agree with Dupuis as concerns the inconveniences of the name *rubra* Girschner (see pages 139–140, III A 1 and 3). The oldest name which undoubtedly applies to the species *Ectophasia rubra* Girschner of Dupuis, is *Phasia oblonga* Robineau-Desvoidy 1830, p. 291. The latter would be, on the basis of the available zoological facts, the valid name for the type-species of *Phasia*. The inconvenience remains that *P. oblonga* is an almost unknown name, and Dupuis is right when he says (p. 140,

III A 3), that from the viewpoint of usage, *P. crassipennis* F. would be preferable as type-species of *Phasia*. I accept this and change my proposal to the commission accordingly (see below). The generic concept of *Phasia* is not altered by this change.

6. I am surprised that Dupuis calls the usage of *Phasia*, as introduced by him in 1949 (in the sense of *Phorantha* Rond.), the " status quo " (p. 139, chapter III). When discussing the " usage routinier " of *Phasia* (p. 140, B 3, last paragraph) he avoids citing the specialists of the present century (Stein 1924, Baranov 1929, Villeneuve 1933, Mesnil 1939 and others) who have continued the established use of the generic name *Phasia* for *crassipennis* F. The reference to Villeneuve 1933 (cited by Dupuis in the preceding paragraph) concerns an erroneous use of the name *Ectophasia*. Villeneuve (l.c., page 197) describes two new species from China and defines the generic concept as follows: " Le genre *Ectophasia* Aldrich [sic] s'éloigne du genre *Phasia* Latr. par l'absence de dimorphisme sexuel ". Villeneuve thus used the name *Ectophasia* for an asiatic species-group and conserved the name *Phasia* for *crassipennis* F.

7. In his chapter III C 1 on page 140, Dupuis shows that the change in the meaning of *Phasia*, as adopted by Dupuis and Sabrosky, necessitates a corresponding change on the supragenetic level. The established name *Phasiinae* should be replaced by *Ectophasiinae*, a name never used before. There is, thus, an " upsetting change in family-group names " (Sabrosky, volume 23, page 9, paragraph 2).

8. The facts concerning *Phasia* have now become rather clear and are to be summarized as follows: Latreille (1810) designated as type of *Phasia* the species *Thereva subcoleoptrata* Fabricius, which he considered as specifically different from *Conops subcoleoptratus* Linné. Meigen (1824) examined material of both Linné's and Fabricius' *subcoleoptrata* and found them, in fact, belonging to different species-groups which were later raised to generic rank by Robineau-Desvoidy (1830). The material seen by Meigen in Fabricius' collection has not the status of a type in a strict sense because Fabricius, in his text, refers to the collection of Bosc. The Bosc material is lost (unless the material in Fabricius' collection is a part of it), but there is no indication that it was a species different from the one that was present in the collection of Fabricius.

Meigen identified the material of *Th. subcoleoptrata* F. as a variety of *crassipennis* F. This determination was correct from the taxonomic viewpoint which was generally accepted in the period from Girschner (1888) till Dupuis (1949). The discovery of two valid species within the *crassipennis*-complex complicates the situation, because the material of *Th. subcoleoptrata* in Fabricius' collection was probably not the true *crassipennis* F., but the other species, *rubra* Girschner of Dupuis, the valid name of which is *Phasia oblonga* R.D.

The use of the generic name *Phasia* was restricted to the *crassipennis*-complex by Robineau-Desvoidy (1830) and this usage has been followed without exception till 1910, and by many authors even till now. Coquillett (1910) and Dupuis (1949) have considered *hemiptera* F. or *subcoleoptrata* Linné (nec Fabricius), respectively, as being the type-species of *Phasia* and have thus transferred the name to another genus, but this has not found general acceptance.

In agreement with Dupuis' paragraph III A 3 (page 140) I change my original proposal[1] as follows: In order to avoid confusion and to maintain stability of nomenclature, it is requested that the International Commission should take the following action:

(1) use its plenary powers to set aside all designations of type-species for *Phasia* Latreille 1804, made prior to the ruling now requested, and having done so designate *Syrphus crassipennis* Fabricius, 1794 (included into the genus *Phasia* under the same species name by Latreille) to be the type-species of that genus;

[1] The paragraph concerning the proposed action of the Commission, as included in my first paper (volume 22, page 245) and repeated with some changes here, was formulated by the Editor. This help is gratefully acknowledged. There was a slight mistake concerning *rubra* Girschner in this paragraph (see Dupuis, page 134, footnote 1, and page 139, paragraph III A 1), for which I am not responsible.

(2) place the generic name *Phasia* Latreille, 1804 (gender: feminine) type-species by designation under the plenary powers in (1) above, *Syrphus crassipennis* Fabricius, 1794, on the Official List of Generic Names in Zoology;

(3) place the species name *crassipennis* Fabricius, 1794 (*Entomologia systematica*, vol. 4, p. 284) as published in the binomen *Syrphus crassipennis* (type-species of *Phasia* Latreille, 1804) on the Official List of Specific Names in Zoology.

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NOTES ON THE RIDE AND LEMCHE COMMENTS ON MY PROPOSAL ON *NOMINA DUBIA*. Z.N.(S.) 1715

(see volume 22, pages 265–266; 23, pages 11–12)

By Curtis W. Sabrosky (*Entomology Research Division, Agr. Res. Serv., U.S. Department of Agriculture, Washington, D.C.*)

Commissioners Ride and Lemche may be right in a certain sense that a formal Declaration is unwarranted or undesirable. However, it may be argued also that the situation is indeed one " not properly or completely covered by the Code " (78a), and that what is needed is an amendment (hence a Declaration or provisional amendment) as an addition to the guiding principles regarding the exercise of the plenary powers (79a). Such an amendment would in reality be no more than giving effect to a decision of the London Congress. I had originally considered that the first step should be a decision in principle, followed (if the vote were favourable) by working out of appropriate wording in English and French. However, it may be useful at this stage in the discussion to have a possible wording before us. I suggest the following for consideration as paragraph (iv) of Article 79a:

" (iv) a name that is a *nomen dubium* is not to be suppressed for that reason alone; if its identity is ever discovered, the name may then be suppressed if its application can be shown to constitute a serious disturbance to stability or universality."

It seems to me that if the Commission agrees in principle, it must do more than " silently agree " (Lemche). To remain silent will encourage zoologists to continue to prepare applications for suppression of *nomina dubia*. Even if the Secretary dares to return them (and I doubt that he would feel able to do so on the ground—scarcely quotable to correspondents as a defense or justification—of silent agreement among the Commissioners), he has added his waste time and postage to the applicant's original wastage.

Some positive, quotable decision is needed. I would not object to a definite statement of policy outside of a Declaration, so long as it is printed in the Bulletin as a notice to zoologists and as a basis that the Secretary can cite for return of an application. However, a formal amendment will be a more effective and forceful means of disposing of the problem, and in the future it will undoubtedly be more readily available to more people in future editions of the Code than in a volume of the Bulletin.

The case of *Xyleborus* cited by Dr. Lemche is not relevant to the present one. *Nomina dubia* are suppressed as such for the purpose of the Law of Priority but not for those of the Law of Homonymy. *Xyleborus* Bowdich is a senior primary homonym. If the importance of the junior primary homonym merits its conservation, the senior must be disposed of by plenary action on the basis of the homonymy, not because it is a *nomen dubium*.

COMMENT ON THE APPLICATION ON *TRYCHOSIS* FOERSTER (Z.N.(S.) 1712)

(see volume 22, pages 259–260)

By Curtis W. Sabrosky (*Entomology Research Division, U.S. Department of Agriculture, Washington, D.C., U.S.A.*)

Van Rossem's application makes no mention of the vital role of *Cryptus ambiguus* Tschek in this case, and it seems important to bring this to the attention of the Commissioners.

Schmiedeknecht (1904, *Opuscula ichneumonologica*, **2**, Fasc. 7 : 487) placed *C. ambiguus* Tschek, 1870, in the synonymy of what he called " *titillator* Grav. [enhorst]." Perkins (1962), in an important study of the type-species of Foerster's genera, recognized that *titillator* was misidentified by Schmiedeknecht (i.e., it was not the true *titillator* Linnaeus) and adopted *ambiguus* Tschek as the valid name for *titillator* auctt.

nec Linnaeus, and hence for the type-species of *Trychosis* Foerster. In this Perkins has been followed by Townes, Momoi, and Townes (1965, *A catalog and reclassification of the eastern palaearctic Ichneumonidae*, Amer. Ent. Institute, 661 pp., *Trychosis* on p. 189), and he will be followed in Supplement 2 of the catalogue of the *Hymenoptera of America North of Mexico* (in page proof as these lines are written). The format of Townes *et al.* shows this clearly as " Type: *Cryptus titillator* (Linnaeus) Gravenhorst = *ambigua* (Tschek)."

As a case of misidentified type-species, technically this should have been submitted to the Commission under Article 70a, but the literature is replete with cases where authors have not done so: They determine the true zoological identity of the misidentified type-species, and then recognize the true species as the type-species.

Van Rossem has now presented the case to the Commission, as provided under Article 70a. However, he applies for designation of *Cryptus mesocastanus* Tschek as type, without mention of *ambiguus* already adopted in several important reference works. There are possible alternatives, but these have not been presented to the Commission.

In a paper published subsequent to his application, in 1966 (*Zool. Verh.*, Leiden, no. 79, 40 pp.), van Rossem synonymized *ambiguus* Tschek under *Trychosis mesocastana* (Tschek), but without mention of Perkins' important work on the Foerster genera and without presentation of any reasons for choosing *mesocastanus* over *ambiguus*. Either could have been chosen to represent *titillator* sensu Gravenhorst and Schmiedeknecht. In view of the latter's recognition of *ambiguus* and the fact that important recent works and catalogues have followed his interpretation, *ambiguus* would certainly have been the logical choice. It happens that *mesocastanus* has page precedence over *ambiguus* (p. 144 against 145), but it is not mandatory that a reviser follow page precedence. Indeed, it is recommended (Rec. 24A) that a first reviser should give first consideration to stability and universality, and should apply position precedence only if no other name has any special advantage. In the present case, *ambiguus* has a decided advantage.

I agree with van Rossem that Article 70b does not apply, as claimed by Perkins (*Bull. zool. Nomencl.* 23 : 8). The use of an incorrect author's name is not in itself proof of deliberate use of a misidentification; it is dealt with elsewhere in the Code in Article 67g. If Perkins had followed 70b in solving the Foerster problems, he should then have cited the type-species as *Trychosis titillator* Schmiedeknecht (cf. 70b, i).

In order to keep the literature as uniform as possible (the literature of *ambiguus* as type-species is recent, but the major works will probably be references for some time to come), I believe it appropriate to deny the first request of van Rossem and instead to designate *ambiguus* as type-species of *Trychosis*.

Beyond that, one might either (1) let the first reviser rule operate, however unfortunate it is in this case, and recognize that *ambiguus* = *mesocastanus* as the valid name for the type-species (van Rossem, first reviser, 1966), or (2) in the same Opinion suspend the Rules and fix *ambiguus* as the valid name of the type-species based on the usage of Schmiedeknecht (1904), Perkins (1962), and Townes *et al.* (1965).

Taxonomy should have a Law or Canon of Parsimony, which should operate to require the respect and recognition of reasonable actions of others as far as possible, in order to avoid unnecessary name-changing, unnecessary applications to the Commission, and extra bookwork for many people.

COMMENTS ON THE ADDITION OF *GALERITA* FABRICIUS, 1801, TO THE OFFICIAL LIST. Z.N.(S.) 1739

(see volume 23, pages 60–61)

By Thomas C. Barr, Jr. (*University of Kentucky, Lexington, Kentucky. U.S.A.*)

I wish to support the application of Dr. Hans Reichardt to place *Galerita* Gouan, 1770 (Pisces) on the Official Index and to place *Galerita* Fabricius, 1801 (Coleoptera) on the Official List. *Galerita* Fabricius is widely used by specialists and non-specialists alike. In my opinion, favourable action on Dr. Reichardt's application would considerably reduce confusion which would result by a strict application of the Rules in this instance.

By P. J. Darlington, Jr. (*Museum of Comparative Zoology, Harvard University, Cambridge, Mass., U.S.A.*)

I think Dr. Reichardt's statement of the case is clear and convincing, and I should like to second his statement that *Galerita* Fabricius, as used for a genus of carabid beetles, has been and still is widely used by both specialists and non-specialists for a genus of common American species. I also approve the steps suggested by Dr. Reichardt to reject certain other names and to make available the family-group name GALERITINI Lacordaire, 1854.

By J. Nègre (*Muséum National d'Histoire Naturelle, Versailles, France*)

Dans le *Bulletin of Zoological Nomenclature*, vol. 23 (1), je relève la proposition de M. Hans Reichardt pour que le nom de genre *Galerita* soit appliqué aux Coléoptères carabiques décrits sous ce nom par Fabricius en 1801, demandant le rejet comme *nomen nudum* de *Galerita* Gouan, 1770.

Je suis spécialiste en Carabiques depuis de longues années, Attaché au Museum National d'Histoire Naturelle et Collaborateur de l'Institut Espagnol d'Entomologie et, à ce titre, je dois vous dire qu'étant donné, d'une part, le nombre considérable d'ouvrages ou separata traitant des insectes de ce groupe classé dans tous les Musées du monde sous ce nom alors que le nom créé par Gouan, avant Linné, pour un genre de poisson n'a pratiquement jamais été employé ni dans la littérature Ichtyologique ni pour le rangement des collections y relatives d'autre part; je suis tout-à-fait de l'avis de M. Reichardt et qu'en conséquence, je recommande également que la solution qu'il préconise soit adoptée par la Commission de nomenclature zoologique.

By Carl. H. Lindroth (*Zoological Institute, Lund University, Sweden*)

Dr. Reichardt's opinion that *Galerita* Fabricius should be preserved and the *nomen nudum Galerita* Gouan, 1770 (Pisces) consequently rejected is well founded. His presentation and conclusion are clear and I wish to support him in this case.

By P. Basilewsky (*Musée Royal de l'Afrique Centrale, Tervuren, Belgium*)

J'ai lu avec attention la proposition, ce qui m'amène aux considérations suivantes:

1. Dans ma " Revision des Galeritininae d'Afrique et de Madagascar " (*Ann. Mus. roy. Afr. centr.*, in - 8°, *Zool.*, 120, 1963, pp. 1–93), j'ai montré que la nomenclature de ce groupe n'offre aucune difficulté et ne pose pas de problèmes.

2. Le nom *Galerita* Gouan, 1770, a été établi d'une manière parfaitement valide.

3. L'homonymie de *Galerita* Gouan, 1770, et de *Galerita* Fabricius, 1801, a déja été signalée et corrigée par E. Strand, qui a proposé en 1936 le nom nouveau de *Galeritula* en remplacement de celui de Fabricius. En 1949, R. Jeannel, n'ayant pas eu connaissance du nom de Strand, proposait à son tour celui de *Galeritina* pour

remplacer *Galerita* Fabricius. *Galeritina* Jeannel est un synonyme junior de *Galeritula* Strand, qui a la priorité.

4. R. Jeannel proposait aussi en 1949 le nom du groupe-famille Galeritinini en remplacement de Galeritini Lacordaire, 1854. En 1963 Jedlicka proposait pour le même taxon celui de Galeritulini, se basant sur le fait que *Galeritina* est un synonyme junior de *Galeritula*. Le Code International de Nomenclature Zoologique précise (articles 39 et 40) que, tandis que " le nom d'un taxon du groupe-famille n'est pas valide si le nom de son genre-type nominal est un homonyme récent ", par contre, " lorsque un genre-type nominal est rejeté en tant que synonyme récent, un nom du groupe-famille fondé sur lui n'a pas à être changé, mais continue à être le nom valide du taxon du groupe-famille qui contient à la fois le synonyme ancien et le synonyme récent ". Par conséquent, si le nom Galeritini Lacordaire, 1854, doit être rejeté pour raison d'homonymie du genre-type, le nom Galeritinini Jeannel, 1949, reste parfaitement valable, même si son genre-type *Galeritina* Jeannel est un synonyme récent de *Galeritula* Strand. Par contre le nom de Galeritulini Jedlicka, 1963, doit être rejeté.

5. La synonymie suggérée par H. Reichardt de *Diabena* Fairmaire est tout à fait subjective et ne sera certainement pas admise à l'unanimité par les carabidologues. Cet argument n'a donc aucune valeur pour la proposition faite par cet auteur.

6. Il résulte donc que la nomenclature de ce groupe n'offre aucun problème, et que les noms de *Galeritula* Strand en remplacement de *Galerita* Fabricius, et celui de Galeritinini ou Galeritininae en remplacement de Galeritini ou Galeritinae, ne présentent aucun inconvénient ni aucun motif de confusion possible.

7. Pour les raisons, je prie la Commission Internationale de ne pas faire intervenir les pleins pouvoirs dans ce cas, qui peut parfaitement être clarifié par la procédure habituelle, et dont la stabilité et l'universalité ne sont nullement menacées (article 79).

8. Je me permets d'attirer l'attention de la Commission Internationale de Nomenclature Zoologique sur le grave inconvénient qu'il y aurait à user trop souvent de ses pleins pouvoirs et de suspendre l'application des dispositions de son propre Code, quand ce n'est pas absolument nécessaire. Une telle façon de procéder serait abusive; non seulement elle ne faciliterait pas l'exercice de la Nomenclature, mais bien au contraire nuirait à sa stabilité et son universalité.

By G. E. Ball (*University of Alberta, Edmonton, Canada*)

I can add nothing to the paper but I support fully the petition of Dr. Reichardt that the name *Galerita* Gouan, 1770 be rejected, thereby making the name *Galerita* Fabricius, 1801, available for use in the family Carabidae. However, I should add that the issue involved is minor, and refusal by the Commission to suspend the Rules will cause very little inconvenience to students of Carabidae.

By R. T. Bell (*University of Vermont, Burlington, Vermont, U.S.A.*)

I am not in a position to comment on the accuracy of the facts as summarized in Dr. Reichardt's paper. As a specialist in Carabidae I can only testify that it would be a matter of great convenience if the name *Galerita* could be retained for the large and almost cosmopolitan genus which has borne it so long. In North America, in particular, where the species are large, showy, and rather common, the name has been widely used by amateur collectors, in popular nature books, and by ecologists, as well as appearing extensively in the technical literature of entomology. Of the possible alternative names, *Galeritula* Strand has already caused much inconvenience, since it is so similar to *Galerita* that it is almost constantly misread as " Galerita ". The other possible name, *Diabena* Fairmaire, as pointed out by Dr. Reichardt, has previously been restricted to two aberrant and supposedly generically distinct Madagascar species. Since the name has never really been used (I refer to *Galerita* Gouan) in the literature of ichthyology, and there seems to be almost no possibility of it being needed in the future, I believe that following Dr. Reichardt's proposals would not inconvenience ichthyologists in the slightest, while it would be of considerable help in beetle systematics.

By W. E. China (*Assistant Secretary to the Commission*)

On reading Dr. Basilewsky's comment I examined Gouan's 1770 work, and found *Galerita* Gouan to be a valid name. The name is not a *nomen nudum* since Gouan referred to Rondelet's 1554 description, such a bibliographic reference constituting an indication (Art. 16a(i)). Nor may *Galerita* Gouan be rejected as a name published in synonymy since it was used as a senior homonym before 1961 (Art. 11d). *Galerita* Gouan is therefore an available name and is a senior homonym of *Galerita* Fabricius, 1801, as realised by Strand, 1906, who proposed the replacement name *Galeritula*, and by Jeannel, 1949, who proposed the replacement name *Galeritina*.

Basilewsky is correct in stating that Jeannel's family-group name GALERITININAE takes precedence over GALERITULINA Jedlicka, 1963, even though it is based on *Galeritina*, a junior synonym of *Galeritula* (Art. 40).

Since a number of zoologists have supported Reichardt's application, I suggest that when the time comes Commissioners should vote on revised proposals, as follows:

(1) to use its plenary powers to suppress the generic name *Galerita* Gouan, 1770, for the purposes of both the Law of Priority and the Law of Homonymy;

para (3) as (4) to be revised as follows:

to place the following generic names on the Official Index of Rejected and Invalid Generic Names in Zoology:

(a) *Galerita* Gouan, 1770 (as suppressed under the plenary powers in (1) above);

(b) *Galeritula* Strand, 1936 (a junior objective synonym of *Galerita* Fabricius, 1801);

(c) *Galeritina* Jeannel, 1949 (a junior objective synonym of *Galerita* Fabricius, 1801).

Reichardt's proposals (1) (2) (4) and (5) to stand as (2) (3) (5) and (6).

COMMENTS ON THE PROPOSED SUPPRESSION OF *ANOPHELES ERRABUNDUS* (SWELLENGREBEL, 1925). Z.N.(S.) 1760

(see volume 23, page 190)

By W. H. Cheong (*Institute for Medical Research, Kuala Lumpur, Malaysia*)

I am glad to see that Dr. J. A. Reid and a co-worker of Swellengrebel, Dr. J. Bonne-Wepster, have taken the trouble to re-examine the specimens described as *Anopheles errabundus* and obtained the opinions of Drs. M. T. Gilles, P. F. Mattingly and Alan Stone to assist in clearing up the problem. It does not in any way cast doubts as to the integrity or ability of the original author.

In our experience of materials collected in Cambodia, Thailand, Malaya, Sarawak and Borneo, we have not seen further specimens of *A. errabundus* or specimens closely resembling it. In my opinion and in view of the evidence now brought to light, it is very unlikely that *A. errabundus*, which is shown to be in fact *A. darlingi* of South America, could have been collected in South-East Borneo and I would certainly support the proposed suppression particularly to avoid confusion amongst workers in the South-East Asian region.

By F. Y. Cheng (*Western Pacific Region, World Health Organization*)

Although I have been in Sabah (North Borneo) for more than eight years as WHO Entomologist I have not been able so far to collect *Anopheles errabundus*.

COMMENT ON THE PROPOSED ALTERATION OF THE SPELLING OF *GRACILLARIA* HAWORTH, 1828. Z.N.(S.) 1757

By P. E. S. Whalley (*British Museum* (*Natural History*), *London*)

We are opposed to the proposal which would alter the original spelling of *Gracillaria* Haworth, 1828.

Paragraph 1 of the proposal by Zimmermann and Riley contends that Haworth mis-spelled the word. There is no evidence for this. Haworth consistently used *Gracillaria* with a double " l " six times in the text and once in the Index. The Proposers attribute the mis-spelling to incorrect latinisation of the word. Article 32a(ii) of the Code specifically states that improper latinisation is not to be considered as an inadvertent error, and the original spelling of the name is to be retained.

In paragraph 2, referring to Zeller's alteration of the spelling, the Proposers say " Zeller emended the spelling without specifically stating that he was so doing". Zeller's alteration must therefore be treated under Article 33 as an incorrect subsequent spelling, since he made no comment. By contending that Zeller " emended " the spelling, the Proposers are introducing the requirements of the Code. In paragraph 2 the Proposers reiterate the incorrect latinisation, which is unacceptable under the Code.

Paragraph 3 of the proposals states " Considerable confusion exists in the literature because of the variant spellings of this generic and family-group name ". This is an exaggeration of the position. There exist two spellings of the genus and family name, one with a single " l ", one with a double " l ". No confusion has arisen as to what was intended with either spelling. The original spelling has been retained by about as many workers as have used the altered version. For example, Curtis 1833, Duponchel 1835, Bainbrigge-Fletcher 1929, Kloet & Hincks 1945, Vari 1961, have used *Gracillaria* while Zeller 1839, Stainton 1854, Meyrick 1895, Staudinger 1901, Forbes 1923, have used *Gracilaria*.

We ask the Commission:

(1) to reject the proposal to alter the original spelling of *Gracillaria* Haworth, 1828.

(2) to place the generic name *Gracillaria* Haworth, 1828, type-species by subsequent designation, *anastomosis* Haworth, 1828, on the Official List of Generic Names in Zoology.

(3) to place the family-group name GRACILARIIDAE Stainton, 1854 (an incorrect original spelling for GRACILLARIIDAE) on the Official Index of Rejected and Invalid Family-Group Names in Zoology.

(4) to place the family-group name GRACILLARIIDAE Stainton, 1854 (type-genus *Gracillaria* Haworth, 1828) on the Official List of Family-Group Names in Zoology.

This proposal is supported by the following:

British Museum (Natural Nistory)
R. J. Collins — P. Seymour
D. S. Fletcher — W. G. Tremewan
I. W. B. Nye — W. H. T. Tams
K. Sattler
Commonwealth Institute of Entomology
J. D. Bradley

By I. F. B. Common and K. H. L. Key (*Division of Entomology, CSIRO, Canberra, Australia*)

The case rests primarily upon the application of Article 32 of the Code, and whether or not " there is in the original publication clear evidence of an inadvertent error ". Immediately after the generic name *Gracillaria* in Haworth 1828 (Lepidoptera Britian-

nica, page 527) there appears in parenthesis " The Slender ", leaving us in no doubt that the author derived the name from the Latin *gracilis*. This is confirmed by the words " corpus omni parte gracilissimum ", used in the description. Haworth's incorrect formation of the neuter superlative of *gracilis* (" *gracilissimum* " instead of " *gracillimum* ") may indicate that he was not expert in Latin. On the other hand, the doubling of the " l " in the correctly formed superlative should give us pause before concluding that the single " l " in *gracilis* necessarily demands a single " l " in every derivative of it. So far as we are aware, " *gracil(l)arius* ", in either spelling, is not a classical Latin word.

The index on page 595 again uses " *Gracillaria* ", an indication that this spelling could scarcely be a simple lapsus calami or a copyist's or printer's error. If it had been such, moreover, it would presumably have been corrected in the " Errata et Corrigenda " on page 590, or in the " Additional Errata " on page 609. There is, in fact, no evidence whatever of an " inadvertent " error in the name as published. If an error was made at all (and this is quite debatable) it falls into the same class of linguistic errors as those (incorrect transliteration, improper latinization, use of inappropriate connecting vowel) that are explicitly excluded from relevance by Article 32. Yet, unless there is *clear* evidence of an *inadvertent* error, Article 32 would require the original spelling *Gracillaria* to be retained (there has been no suggestion of any contravention of Articles 26 to 31).

Although it has no decisive bearing on the case, we may also consider whether Zeller's subsequent spelling was in fact an emendation under the Code. As he did not specifically state that he was emending Haworth's spelling, it is doubtful if his change of spelling can be regarded as " demonstrably intentional " in terms of Article 33. If not, it automatically becomes an incorrect subsequent spelling.

The effect of a strict application of the Code is thus not, as the applicants suppose, to validate the subsequent spelling *Gracilaria*, but the original spelling *Gracillaria*. The only way in which *Gracilaria* can be validated is by action under the Commission's plenary powers. Request for such action has not been made; if it were to be made, evidence would have to be adduced that stability and uniformity of nomenclature would best be served thereby. We would have to oppose this also. In spite of the applicants' claim to the contrary, no " confusion " exists by reason of the variant spellings, since both have always meant the same thing and nothing else. However, " uniformity " certainly requires one to be employed to the exclusion of the other, and it so happens that the original spelling, which is correct under the Code, is also the one whose universal adoption would best accord with current usage. For example, the family name GRACILLARIIDAE has been used consistently by the Zoological Record since 1949, the species of this family being earlier included in the Tineidae (sensu latus). During the last twelve years the original spelling *Gracillaria* or the family name GRACILLARIIDAE have been used by the majority of lepidopterists including McDunnough (1954), Bradley (1956 onwards), Hering (1958), Vari (1961) and Kumata (1961 onwards).

For the above reasons we recommend that Zimmerman and Riley's application be rejected by the Commission and that the names *Gracillaria* and GRACILLARIIDAE be placed on the appropriate official lists, and *Gracilaria* and GRACILARIIDAE on the corresponding Official Indexes.

COMMENT ON THE PROPOSED SUPPRESSION OF *HIPPOCAMPUS ERECTUS* PERRY (1810) (PISCES) Z.N.(S.) 1753 (see volume 23, page 178)

by C. Richard Robins (*Institute of Marine Science, University of Miami*)

Mrs. Dick's application to suppress the name *Hippocampus erectus* Perry for the common seahorse of the western Atlantic is misleading. While it may be argued that *Hippocampus hudsonius* De Kay, 1842 has been applied only and clearly to the one species in question, it has by no means been the only name applied to this species. For example Jordan and Evermann, 1896, *Bull. U.S. Nat. Mus.* **47** (1) : 777–778 treated it under *Hippocampus hudsonius* De Kay, *Hippocampus punctulatus* Guichenot and *Hippocampus stylifer* Jordan and Gilbert. Ginsburg in his Review of the Seahorses (*Hippocampus*) . . . , *Proc. U.S. Nat. Mus.* **83** (2997) : 551, 566 and 568, lists numerous names applied to this species in some 25 cited works. The implication by Mrs. Dick that *Hippocampus hudsonius* has been the only name applied to this species clearly is incorrect.

I am unaware of any suggestion by Dr. Böhlke that *Hippocampus erectus* Perry be revived but the name needs no revival since it is in current use by some authors. A short search showed the following uses of *erectus*. No doubt there are others.

1. Bailey, R. M. *et al.*, 1960. A list of common and scientific names of fishes from the United States and Canada. *Spec. Pub. Amer. Fish. Soc.*, **2** : 23
2. Briggs, J. C., 1958. A list of Florida fishes and their distribution. *Bull. Fla. State Mus.*, **2**(8) : 267 (2 subspecies: *Hippocampus erectus erectus* Perry and *Hippocampus erectus hudsonius* De Kay)
3. Duarte-Bello, P. B., 1959. Catalogo de peces cubanos. *Monogr. Univ. Catolica de Santo Thomas de Villanueva*, **6** : 50 (as *Hippocampus erectus erectus Perry* and *Hippocampus erectus hudsonius* DeKay and 2 other synonyms)
4. Fichter, G. S., 1963. The Golden bookshelf of Natural History. *Fishes*. Golden Press, N.Y., p. 81
5. McClane, A. J., editor. 1965. *McClane's Standard Fishing encyclopedia*, p. 778.

Therefore, the implication that *Hippocampus erectus* is not in use is incorrect although *H. hudsonius* has surely been more widely used until recently.

Finally the question of the identity of *H. erectus* itself must be considered. Mrs. Dick says it is unidentifiable. However, Ginsburg in his review identified *erectus* with the subspecies *Hippocampus hudsonius punctulatus* and listed it (p. 561) as a senior synonym. He discussed *erectus* further on pages 516–517, 566. Ginsburg's main doubts were expressed with regard to which subspecies of the common seahorse was involved, not with the species. Should *erectus* now be suppressed as Mrs. Dick requests then *punctulatus* would apply to the southern subspecies, if it continues to be recognized, or to that entity if it is subsequently shown to be a separate species. In view of the geographic origin and size of Perry's specimen, *H. erectus* could apply only to the species in question or to *H. reidi* among currently recognized species. The ribbed nature of the colour pattern on the neck eliminates the boldly spotted *reidi*. It seems to this correspondent that *H. erectus* is identifiable and that it has been correctly applied in the works mentioned above.

I recommend that the proposed suppression of *Hippocampus erectus* Perry be denied.

OPINION 807

STRINGOCEPHALUS DEFRANCE, 1825 (BRACHIOPODA): VALIDATION OF EMENDATION FROM *STRYGOCEPHALE*

RULING.—(1) Under the plenary powers the emendation to *Stringocephalus* of *Strygocephale* Defrance 1825, is hereby validated.

(2) The generic name *Stringocephalus* Defrance 1825 (gender: masculine), type-species, by monotypy, *Terebratula burtini* Defrance, 1824, is hereby placed on the Official List of Generic Names in Zoology with the Name Number 1752.

(3) The specific name *burtini* Defrance, 1824, as published in the binomen *Terebratula burtini* (type-species of *Stringocephalus* Defrance, 1825) is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2192.

(4) The following generic names are hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology with the Name Numbers specified:

(a) *Strygocephale* Defrance, 1825 (Ruled under the plenary powers in (1) above to be an incorrect original spelling for *Stringocephalus*) (Name No. 1899);

(b) *Strigocephalus* Defrance, 1827 (an incorrect spelling for *Stringocephalus* Defrance, 1825) (Name No. 1900);

(c) *Strygocephalus* Goldfuss, 1842 (an incorrect spelling for *Stringocephalus* Defrance, 1825) (Name No. 1901).

(5) The family-group name STRINGOCEPHALIDAE (correction of STRIGOCEPHALIDAE) King, 1850 (type-genus *Stringocephalus* Defrance, 1825) is hereby placed on the Official List of Family-Group Names in Zoology with the Name Number 420.

HISTORY OF THE CASE (Z.N.(S.) 1646)

The present case was submitted to the office of the Commission by Prof. Raymond C. Moore in April 1964. Prof. Moore's application was sent to the printer on 13 July 1964 and was published on 31 December 1964 in *Bull. zool. Nomencl.* **21** : 438–439. Public Notice of the possible use of the plenary powers was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184). No comment was received.

DECISION OF THE COMMISSION

On 25 October 1966 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (66)55 either for or against the proposals set out in *Bull. zool. Nomencl.* **21** : 439. At the close of the prescribed voting period on 25 January 1967 the state of the voting was as follows:

Affirmative votes—twenty-two (22), received in the following order: China, Holthuis, Vokes, Lemche, Obruchev, Mayr, Munroe, do Amaral, Tortonese,

Jaczewski, Boschma, Alvarado, Uchida, Sabrosky, Stoll, Bonnet, Kraus, Mertens, Ride, Forest, Brinck, Evans.

Negative votes—none (0).

Voting Papers not returned—two (2): Hubbs, Simpson.

Commissioner Binder returned a late affirmative vote.

Original References

The following are the original references for names placed on Official Lists and Index by the Ruling given in the present Opinion:

burtini, *Terebratula*, Defrance, 1824, *Dict. Sci. nat.* **32** : 301

Strigocephalus Defrance, 1827, *in* Blainville, *Man. malac.*: pl. 53, figs. 1–1c

STRINGOCEPHALIDAE King, 1850, *Mon. Perm. Foss.* (Pal. Soc.): 141

Stringocephalus Defrance, 1825, *in* Blainville, *Man. malac.*: 511

Strygocephale Defrance, 1825, an incorrect original spelling for *Stringocephalus q.v.*

Strygocephalus Goldfuss, 1842, *in* d'Archiac & de Verneuil, *Trans. geol. Soc. London* (2) **6** : 369, pl. 56, figs. 5–5a

CERTIFICATE

We certify that the votes cast on Voting Paper (66)55 were cast as set out above, that the proposals contained in that Voting Paper have been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 807.

G. OWEN EVANS
Secretary

W. E. CHINA
Assistant Secretary

International Commission on Zoological Nomenclature
London
16 *February* 1967

OPINION 808

CRYPTORHYNCHUS ILLIGER, 1807 (INSECTA, COLEOPTERA): DESIGNATION OF A TYPE-SPECIES UNDER THE PLENARY POWERS

RULING.—(1) Under the plenary powers all designations of type-species for the nominal genus *Cryptorhynchus* Illiger, 1807, made prior to the present Ruling, are hereby set aside, and the nominal species *Curculio lapathi* Linnaeus, 1758, is hereby designated to be the type of that genus.

(2) The generic name *Cryptorhynchus* Illiger, 1807 (gender: masculine), type-species, by designation under the plenary powers in (1) above, *Curculio lapathi* Linnaeus, 1758, is hereby placed on the Official List of Generic Names in Zoology with the Name Number 1753.

(3) The specific name *lapathi* Linnaeus, 1758, as published in the binomen *Curculio lapathi* (type-species of *Cryptorhynchus* Illiger, 1807) is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2193.

(4) The family-group name CRYPTORHYNCHINAE (correction of CRYPTORHYNCHIDES) Schoenherr, 1825 (type-genus *Cryptorhynchus* Illiger, 1807) is hereby placed on the Official List of Family-Group Names in Zoology with the Name Number 421.

HISTORY OF THE CASE (Z.N.(S.) 1648)

The present case was submitted to the office of the Commission by Dr. D. G. Kissinger in May 1964. Dr. Kissinger's application was sent to the printer on 2 September 1964 and was published on 31 December 1964 in *Bull. zool. Nomencl.* **21** : 440–441. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184) and to seven entomological serials. The proposals were supported by Dr. M. G. Morris, Dr. G. Kuschel and Dr. John W. E. Harris. Dr. Lemche suggested that, as an additional safeguard, para. (1) should be reworded as follows: " to suppress all designation of type-species for *Cryptorhynchus* Illiger, 1807, made prior to the Ruling now proposed and, having done so, to designate *Curculio lapathi* Linnaeus, 1758, to be the type-species of that genus ".

DECISION OF THE COMMISSION

On 25 October 1967 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (66)56 either for or against the proposals set out in *Bull. zool. Nomencl.* **21** : 441, as amended by Dr. Henning Lemche (see above). At the close of the prescribed voting period on 25 January 1967 the state of the voting was as follows:

Affirmative votes—twenty-two (22), received in the following order: China, Holthuis, Vokes, Lemche, Obruchev, Mayr, Brinck, Munroe, do Amaral, Tortonese, Jaczewski, Boschma, Alvarado, Uchida, Sabrosky, Stoll, Bonnet, Kraus, Mertens, Ride, Forest, Evans.

Negative votes—none (0).
Voting Papers not returned—two (2): Hubbs, Simpson.
Commissioner Binder returned a late affirmative vote.

ORIGINAL REFERENCES

The following are the original references for names placed on Official Lists by the Ruling given in the present Opinion:
CRYPTORHYNCHINAE Schoenherr, 1825, *Isis* (Oken) **1825** : col. 585
Cryptorhynchus Illiger, 1807, *Mag. Insektenk.* **6** : 330
lapathi, Curculio, Linnaeus, 1758, *Syst. Nat.* (ed. 10) **1** : 379

CERTIFICATE

We certify that the votes cast on Voting Paper (66)56 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission is truly recorded in the present Opinion No. 808.

G. OWEN EVANS
Secretary

W. E. CHINA
Assistant Secretary

International Commission on Zoological Nomenclature
London
16 *February* 1967

OPINION 809

THUNNUS SOUTH, 1845 (PISCES): VALIDATED UNDER THE PLENARY POWERS

RULING.—(1) Under the plenary powers the generic name *Thinnus* S. D. W[ood?], 1837, is hereby suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy.

(2) The generic name *Thunnus* South, 1845 (gender: masculine), type-species, by tautonymy, through *Thynnus* Cuvier, 1817, *Scomber thynnus* Linnaeus, 1758, is hereby placed on the Official List of Generic Names in Zoology with the Name Number 1754.

(3) The specific name *thynnus* Linnaeus, 1758, as published in the binomen *Scomber thynnus* (type-species of *Thunnus* South, 1845) is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2194.

(4) The following generic names are hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology with the Name Numbers specified:

(a) *Thynnus* Cuvier, 1817 (a junior homonym of *Thynnus* Fabricius, 1775) (Name No. 1902);

(b) *Thinnus* S. D. W[ood?], 1837 (as suppressed under the plenary powers in (1) above) (Name No. 1903).

(5) The family-group name THUNNINAE E. C. Starks, 1910 (type-genus *Thunnus* South, 1845) is hereby placed on the Official List of Family-Group Names in Zoology with the Name Number 422.

(6) The family-group name THINNINAE G. P. Whitely, 1955 (type-genus *Thinnus* S. D. W[ood?], 1837) (invalid because the name of its type-genus has been suppressed under the plenary powers) is hereby placed on the Official Index of Rejected and Invalid Family-Group Names in Zoology with the Name Number 431.

HISTORY OF THE CASE (Z.N.(S.) 1652)

The present case was submitted to the office of the Commission by Dr. Bruce B. Collette and Dr. Robert H. Gibbs in May 1964. The application was sent to the printer on 13 July 1964 and was published on 31 December 1964 in *Bull. zool. Nomencl.* **21** : 442–443. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184) and to one specialist serial.

The application was supported by Prof. E. Tortonese, Prof. C. Richard Robins, Prof. D. P. de Sylva, Dr. W. L. Klawe, Dr. J. S. Ramsey, Prof. Don L. Frizzell, Prof. G. A. Moore, Prof. Milton R. Curd, Dr. Thomas W. McKenney, Prof. Th. Monod, Dr. S. Jones and by the Nomenclature Committee of the American Society of Ichthyologists and Herpetologists (by a unanimous vote).

DECISION OF THE COMMISSION

On 25 October 1966 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (66)57 either for or against the proposal set out in *Bull. zool. Nomencl.* **21** : 442–443. At the close of the prescribed voting period on 25 January 1967 the state of the voting was as follows:

Affirmative votes—twenty-two (22), received in the following order: China, Holthuis, Vokes, Lemche, Obruchev, Mayr, Brinck, Munroe, do Amaral, Tortonese, Jaczewski, Boschma, Alvarado, Uchida, Sabrosky, Stoll, Bonnet, Kraus, Mertens, Ride, Forest, Evans.

Negative votes—none (0).

Voting Papers not returned—two (2): Hubbs, Simpson.

Commissioner Binder returned a late affirmative vote.

Original References

The following are the original references for names placed on Official Lists and Indexes by the Ruling given in the present Opinion:

THINNINAE G. P. Whitley, 1955, *Proc. roy. zool. Soc. N.S. Wales* **1953–1954**: 51–52

Thinnus S. D. W[ood?], 1837, *Analyst* **18** : 108

THUNNINAE E. C. Starks, 1910, *J. Morph.* **21** (1) : 79–80

Thunnus South, 1845, *Encycl. Metrop.* **25** : 620

Thynnus Cuvier, 1817, *Règne Animal* **2** : 313

thynnus, Scomber, Linnaeus, 1758, *Syst. Nat.* (ed. 10) **1** : 297–298

CERTIFICATE

We certify that the votes cast on Voting Paper (66)57 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 809.

G. OWEN EVANS
Secretary

W. E. CHINA
Assistant Secretary

International Commission on Zoological Nomenclature
London
16 *February* 1967

OPINION 810

TURRITELLA KANIERIENSIS G. F. HARRIS, 1897 (GASTROPODA): DESIGNATION OF A LECTOTYPE UNDER THE PLENARY POWERS

RULING.—(1) Under the plenary powers all designations of type specimen for the nominal species *Turritella kanieriensis* Harris, 1897, made prior to the present Ruling are hereby set aside, and the specimen from Kanieri, now in the New Zealand Geological Survey Collections no. TM 3948, which is figured by Suter (1914, *N.Z. geol. Surv. Pal. Bull.*: pl. 16, fig. 5) is hereby designated to be the lectotype of that species.

(2) The specific name *kanieriensis* G. F. Harris, 1897, as published in the binomen *Turritella kanieriensis*, as defined by the lectotype designated under the plenary powers in (1) above, is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2195.

HISTORY OF THE CASE (Z.N.(S.) 1659)

The present case was submitted to the office of the Commission by J. Marwick, A. W. B. Powell, R. K. Dell and C. A. Fleming in August 1964. The application was sent to the printer on 2 September 1964 and was published on 31 December 1964 in *Bull. zool. Nomencl.* **21** : 447–450. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184). No comment was received.

DECISION OF THE COMMISSION

On 25 October 1966 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (66)59 either for or against the proposals set out in *Bull. zool. Nomencl.* **21** : 449. At the close of the prescribed voting period on 25 January 1967 the state of the voting was as follows:

Affirmative votes—twenty-two (22), received in the following order: China, Holthuis, Vokes, Lemche, Obruchev, Mayr, Brinck, Munroe, do Amaral, Tortonese, Jaczewski, Boschma, Alvarado, Uchida, Sabrosky, Stoll, Bonnet, Kraus, Mertens, Ride, Forest, Evans.

Negative votes—none (0).

Voting Papers not returned—two (2): Hubbs, Simpson.

Commissioner Binder returned a late affirmative vote. Commissioners Holthuis and Ride made their affirmative votes conditional upon the adoption of a more precise wording in the Ruling of the Opinion than that adopted by the applicants in their proposals. The wording of the present Ruling has been based on a suggestion by Dr. Holthuis.

Original References

The following is the original reference for a name placed on the Official List by the Ruling given in the present Opinion:

kanieriensis, *Turritella*, Harris, 1897, *Cat. Tert. Moll. Br. Mus.*, Pt. 1, *Australasia*: 240

CERTIFICATE

We certify that the votes cast on Voting Paper (66)59 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion 810.

G. OWEN EVANS
Secretary

W. E. CHINA
Assistant Secretary

International Commission on Zoological Nomenclature
London
17 *February* 1967

OPINION 811

RUNCINA FORBES, 1851 (GASTROPODA): VALIDATED UNDER THE PLENARY POWERS

RULING.—(1) Under the plenary powers the generic name *Pelta* Quatrefages, 1844, is hereby suppressed for the purposes of the Law of Priority, but not for those of the Law of Homonymy.

(2) The generic name *Runcina* Forbes, 1851 (gender: feminine), type-species, by monotypy, *Runcina hancocki* Forbes, 1851, is hereby placed on the Official List of Generic Names in Zoology with the Name Number 1755.

(3) The specific name *coronata* Quatrefages, 1844, as published in the binomen *Pelta coronata*, is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2196.

(4) The family name RUNCINIDAE (correction of RUNCINADAE) Gray, 1857 (type-genus *Runcina* Forbes, 1851) is hereby placed on the Official List of Family-Group Names in Zoology with the Name Number 423.

(5) The generic name *Pelta* Quatrefages, 1844 (as suppressed under the plenary powers in (1) above) is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology with the Name Number 1904.

(6) The family name PELTIDAE [Winckworth], 1931 (type-genus *Pelta* Quatrefages, 1844) (invalid because the name of the type-genus has been suppressed under the plenary powers) is hereby placed on the Official Index of Rejected and Invalid Family-Group Names in Zoology with the Name Number 432.

HISTORY OF THE CASE (Z.N.(S.) 580)

The present case was submitted to the office of the Commission by Dr. Henning Lemche in June 1951. In September 1964 Dr. Lemche revised his application, and this was sent to the printer on 29 September 1964 and published on 5 April 1965 in *Bull. zool. Nomencl.* **22** : 49–50. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin*, as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184) and to two malacological serials. The proposal put forward by Dr. Lemche as Alternative A was supported by Prof. H. Engel and Dr. J. Nijssen-Meyer. Alternative B was supported by J. L. Baily, Jr.

DECISION OF THE COMMISSION

On 25 October 1966 the members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (66)60, in Part 1, either for or against the use of the plenary powers in the present case, and in Part 2, for either Alternative A or Alternative B, as set out in *Bull. zool. Nomencl.* **22** : 49–50. At the close of the prescribed voting period on 25 January 1967 the state of the voting was as follows:

Part 1. Affirmative votes—nineteen (19), received in the following order: China, Vokes, Lemche, Obruchev, Mayr, do Amaral, Tortonese, Jaczewski, Boschma, Alvarado, Uchida, Sabrosky, Stoll, Bonnet, Kraus, Mertens, Forest, Brinck, Evans.

Negative votes—three (3): Holthuis, Munroe, Ride.

Part 2. Votes for Alternative A—fourteen (14): Vokes, Lemche, Mayr, Tortonese, Jaczewski, Boschma, Alvarado, Stoll, Bonnet, Kraus, Mertens, Forest, Brinck, Evans.

Votes for Alternative B—five (5): China, Obruchev, do Amaral, Uchida, Sabrosky.

Voting Papers not returned—two (2): Hubbs, Simpson.

Commissioner Binder returned a late vote in favour of Alternative A. In returning his vote Dr. Holthuis made the following comment: " Alternative B is technically impossible. A family name cannot be suppressed as long as the generic name from which it is derived remains available. This would mean that a zoologist who recognizes *Runcina* as a genus distinct from *Pelta* cannot make it the type of a monotypic family. This constitutes a violation of freedom of taxonomic thought. The Commission could be asked to place both Peltidae and Runcinidae on the Official List with the annotation that the former is to be used in preference to the latter by those authors who think that *Pelta* and *Runcina* belong to the same family-group taxon. If Alternative B had the first paragraph worded in this way I would have been glad to vote for it."

Original References

The following are the original references for names placed on the Official Lists and Indexes by the Ruling given in the present Opinion:

coronata, *Pelta*, Quatrefages, 1844, *Ann. Sci. nat.*, Paris (Zool.) (3)**1** : 151
Pelta Quatrefages, 1844, *Ann. Sci. nat.*, Paris (Zool.) (3)**1** : 151
PELTIDAE [Winckworth], 1931, *Plymouth mar. Fauna* (ed. 2) : 267
Runcina Forbes, 1851, *in* Forbes & Hanley, *Hist. brit. Moll.* **3** : 611
RUNCINIDAE J. E. Gray, 1857, *Guide Syst. Distr. Moll. Brit. Mus.* : 205

CERTIFICATE

We certify that the votes cast on Voting Paper (66)60 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 811.

G. OWEN EVANS
Secretary

W. E. CHINA
Assistant Secretary

International Commission on Zoological Nomenclature
London
17 *February* 1967

OPINION 812

CADLINA BERGH, 1878 (GASTROPODA): VALIDATED UNDER THE PLENARY POWERS

RULING.—(1) The following generic names are hereby suppressed under the plenary powers:

(a) *Acanthochila* Mørch, 1868, for the purposes of both the Law of Priority and the Law of Homonymy;

(b) *Echinochila* Mørch, 1869, for the purposes of the Law of Priority but not for those of the Law of Homonymy.

(2) The generic name *Cadlina* Bergh, 1878 (gender: feminine), type-species, by monotypy, *Doris repanda* Alder & Hancock, 1842, is hereby placed on the Official List of Generic Names in Zoology with the Name Number 1756.

(3) The specific name *laevis* Linnaeus, 1767, as published in the binomen *Doris laevis*, is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2197.

(4) The following generic names are hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology with the Name Numbers specified:

(a) *Acanthochila* Mørch, 1868 (as suppressed under the plenary powers in (1)(a) above) (Name No. 1905);

(b) *Echinochila* Mørch, 1869 (as suppressed under the plenary powers in (1)(b) above) (Name No. 1906).

HISTORY OF THE CASE (Z.N.(S.) 582)

The present case was submitted to the office of the Commission by Dr. Henning Lemche in 1951. In September 1964 Dr. Lemche submitted a revised application which was sent to the printer on 29 September 1964 and was published on 5 April 1965 in *Bull. zool. Nomencl.* **22** : 51–52. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184) and to two malacological serials. The application was supported by Prof. H. Engel, Dr. J. Nijssen-Meyer and J. L. Baily, Jr.

DECISION OF THE COMMISSION

On 25 October 1966 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (66)61 either for or against the proposals set out in *Bull. zool. Nomencl.* **22** : 52. At the close of the prescribed voting period on 25 January 1967 the state of the voting was as follows:

Affirmative votes—twenty-two (22), received in the following order: China, Holthuis, Vokes, Lemche, Obruchev, Mayr, Munroe, do Amaral, Tortonese, Jaczewski, Boschma, Alvarado, Uchida, Sabrosky, Stoll, Bonnet, Kraus, Mertens, Ride, Forest, Brinck, Evans.

Negative votes—none (0).
Voting Papers not returned—two (2): Hubbs, Simpson.
Commissioner Binder returned a late affirmative vote.

ORIGINAL REFERENCES

The following are the original references for names placed on Official Lists and Index by the Ruling given in the present Opinion:

Acanthochila Mørch, 1868, *Vid. Medd. Dansk Naturh. Foren.* **1868** : 202
Cadlina Bergh, 1878, *in* Semper, *Reisen im Arch. Phillip. Malak. Unters.* II, **2** : XXXIV
Echinochila Mørch, 1869, *Ann. Soc. Malac. Belg.* **4** : 9
laevis, Doris, Linnaeus, 1767, *Syst. Nat.* (ed. 12) **1** : 1083

CERTIFICATE

We certify that the votes cast on Voting Paper (66)61 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 812.

G. OWEN EVANS
Secretary

W. E. CHINA
Assistant Secretary

International Commission on Zoological Nomenclature
London
21 *February* 1967

PROTOTOMUS VIVERRINUS COPE, 1874 (MAMMALIA): PROPOSED DESIGNATION OF A NEOTYPE UNDER THE PLENARY POWERS TOGETHER WITH GRANT OF PRECEDENCE TO PALAEONICTIDAE OVER AMBLOCTONIDAE. Z.N.(S.) 1631

By Leigh Van Valen (*Department of Vertebrate Paleontology, American Museum of Natural History, New York, U.S.A.*)

The genus *Prototomus* Cope, 1874 (*Ann. Rept. Chief Engineers* (U.S.), Appendix FF), type-species *P. viverrinus* Cope, 1874, has been a subject of dispute. The anterior part of the skull and the dentition, the only diagnostic parts of the type, are now lost, as stated by the curator in charge of this part of the Cope collection (Gazin, *Smithsonian Misc. Coll.*, **144** : 1–98). Cope and Matthew (e.g. 1909, *Mem. Amer. Mus. nat. Hist.*, **9** : 291–567), the only persons known to have seen the type when complete, later synonymized *Prototomus* with the proviverrine (Hyaenodontidae) genus *Sinopa* (or with *Stypolophus*, a synonym of *Sinopa*) but left the species *P. viverrinus* as valid. McKenna (1960, *Univ. California Pub. Geol. Sci.*, **37** : 1–130) considered *Prototomus* to belong to a different family (or subfamily), the Limnocyonidae. In connection with revisionary work I have compared the original figure and description of *Prototomus viverrinus* with all relevant material, including unpublished collections recently made by Simpson from the type area, and am unable to decide the correct family reference. A third family, the Miacidae, is also a possible recipient. I have examined what remains of the type. The homology of the teeth in the only figure, and therefore the poorly known characters of the individual teeth, depend on which group is chosen. The only unquestionable character of any importance is the relatively small size; Gazin (op. cit.) has referred a specimen questionably to *P. viverrinus* on the basis of size alone after synonymizing *Prototomus* with *Sinopa*.

2. Other species of *Sinopa* of similar size exist, however, and, particularly because of its uncertain familial placement, the type is really indeterminate. A neotype cannot be designated by unilateral action because part of the type, even though not a diagnostic part, still exists. The present nomenclatural situation is chaotic, and could be alleviated either by the suppression of *Prototomus* and *P. viverrinus* or by the designation by the Commission of a neotype. The mandible adequately characterized and figured by Gazin (op. cit.) and referred by him to *P. viverrinus* (as *Sinopa viverrinus*), U.S. National Museum No. 22456 (fossil mammals) has as good a claim as any to be designated as neotype; it is of similar size to the type, is from an at least approximately equivalent stratigraphic horizon, and has already been referred to *P. viverrinus* in the literature. Although this specimen is from southern Wyoming and the type is from northern New Mexico, no specimens from New Mexico are known which could reasonably be conspecific if *Prototomus* is a proviverrine (its usual allocation).

3. The name AMBLOCTONIDAE Cope, 1877 (*Geol. Survey West of the One Hundredth Meridian*, **4** : 84) antedates the name PALAEONICTIDAE Osborn, 1892

(*Bull. Amer. Mus. nat. Hist.*, **4** : 104), but the current usage is to employ the latter name (as PALAEONICTINAE, as subfamily of the OXYAENIDAE). The name AMBLYCTONIDAE Cope, 1880 (*Proc. Amer. phil. Soc.*, **19** : 78), based on an invalid emendation, also antidates the name PALAEONICTIDAE. The Commission is requested to validate current usage by a grant of precedence under the plenary powers to PALAEONICTIDAE over its two older synonyms.

4. The Commission is therefore requested:

(1) to use its plenary powers;

(a) to set aside the remains of the holotype of *Prototomus viverrinus* Cope, 1874, and having done so to designate the mandible U.S.N.M. No. 22456, figured by Gazin (op. cit.), as neotype of that species;

(b) to grant precedence to the family-group name PALAEONICTIDAE Osborn, 1892, over the names AMBLOCTONIDAE Cope, 1877, and AMBLYCTONIDAE Cope, 1880;

(2) to place the following family-group names on the Official List of Family-Group Names in Zoology:

(a) PALAEONICTIDAE Osborn, 1892 (type-genus *Palaeonictis* Blainville, 1842) (Ruled under the plenary powers to be given precedence over AMBLOCTONIDAE Cope, 1877, and AMBLYCTONIDAE Cope, 1880, by any zoologist who considers *Palaeonictis* Blainville and *Ambloctonus* Cope to belong to the same family-group taxon);

(b) AMBLOCTONIDAE Cope, 1877 (type-genus *Ambloctonus* Cope, 1875);

(3) to place the following generic names on the Official List of Generic Names in Zoology:

(a) *Palaeonictis* Blainville, 1842 (*Ostéographie* (N) : 79) (gender : feminine), type-species, by monotypy, *Palaeonictis gigantea* Blainville, 1842 (op. cit. : 76);

(b) *Ambloctonus* Cope, 1875 (*Rept. Engineer Dept., U.S. Army, in Charge of Lieut. G. M. Wheeler* : 7) (gender: masculine), type-species, by monotypy, *Ambloctonus sinosus* Cope, 1875 (op. cit.: 8);

(4) to place the following specific names on the Official List of Specific Names in Zoology:

(a) *viverrinus* Cope, 1874, as published in the binomen *Prototomus viverrinus* (as interpreted by the neotype designated in (1) (a) above);

(b) *gigantea* Blainville, 1842, as published in the binomen *Palaeonictis gigantea* (type-species of *Palaeonictis* Blainville, 1842);

(c) *sinosus* Cope, 1875, as published in the binomen *Ambloctonus sinosus* (type-species of *Ambloctonus* Cope, 1875).

NEMATUS LEACHII DAHLBOM, 1835 (INSECTA, HYMENOPTERA): PROPOSED SUPPRESSION UNDER THE PLENARY POWERS. Z.N.(S.) 1778

By Robert B. Benson (*British Museum (Natural History), London*) and H. R. Wong (*Forest Entomology Laboratory, Box* 6300, *Winnipeg, Manitoba, Canada*)

G. Dahlbom, 1835 (*Conspectus Tenthredinidum, Siricidum et Oryssinorum Scandinaviae* **1** : 10) gave a brief description of a larva feeding colonially on *Larix* in Europe. This reference was quoted by C. G. de Dalla Torre, 1894 (*Catalogus Hymenopterorum* **1** : 200) as a synonym of *Nematus erichsonii* Hartig, 1837 (*Fam. Blatt-u. Holzwespen* : 187) the description of which was based on an adult female.

2. The name *Nematus leachii* has never, so far as we are aware, been used for this species (except in synonymy) since its original description 131 years ago, and, although no types are extant, the larval description has been generally accepted as undoubtedly referring to the well-known boreal holarctic pest of *Larix*, now known as *Lygaeonematus* or *Pristiphora erichsonii* (Hartig), by one or other of which names it has been referred to in innumerable scientific papers and books on insects and forestry for more than a century.

3. The name *Nematus leachii* has apparently never been used because it was based on a larval form, but by Article 24b such names are valid. The International Commission is therefore asked:

(1) to use its plenary powers to suppress the name *leachii* Dahlbom, 1835, as published in the binomen *Nematus leachii*, for the purposes of the Law of Priority but not for those of the Law of Homonymy;

(2) to place the specific name suppressed under (1) above, on the Official Index of Rejected and Invalid Specific Names in Zoology.

BICORNES SCHUCHERT AND LEVENE 1929 (BRACHIOPODA): PROPOSED SUPPRESSION UNDER THE PLENARY POWERS Z.N.(S.) 1781

By D. V. Ager (*Imperial College of Science & Technology, London*) and P. Sartenaer (*Institut royal des Sciences naturelles, Brussels, Belgium*)

F. A. Quenstedt (1852 pp. 447–476) split up the genus " *Terebratula* Lhwyd " [Müller 1776] into nine groups to which he gave the following names: *Terebratulae bicornes* (Plicosae v. Buch.) with 29 species; *Terebratulae calcispirae* with 2 species; *Terebratulae annuliferae* with 2 species; *Terebratulae loricatae* v. Buch. with 6 species; *Terebratulae cinctae* v. Buch. with 6 species; *Terebratulae impressae* with 1 species; *Terebratulae nucleatae* with 3 species; *Terebratulae biplicatae* with 10 species; and *Terebratulae spiriferinae* with 7 species.

Since *T. loricatae*, *T. impressae*, *T. nucleatae* and *T. biplicatae* each contained the species *loricata*, *impressa*, *nucleata* and *biplicata* respectively they may truly be regarded as species-groups. But *T. bicornes*, *T. calcispirae*, *T. annuliferae*, *T. cinctae* and *T. spiriferinae* contained no species with those names and therefore the names *bicornes*, *calcispirae*, *annuliferae*, *cinctae* and *spiriferinae* could conceivably be regarded as subgenera. However it seems clear that F. A. Quenstedt by using the plural spelling was not establishing subgenera, merely species groups. *Cincta* and *Nucleata* have been given generic status by F. A. Quenstedt (1868), but not *Bicornes*.

2. The exact designation of the F. A. Quenstedt group we are here concerned with is " *Terebratulae bicornes*, (Plicosae v. Buch.) " (1852, p. 449). These words are the heading of a paragraph including numerous species, most of which can be referred to L. von Buch's Plicosae (1834, pp. 32–55). Therefore the Latin nominative plural is properly used by Quenstedt.

From paragraphs 1 and 2 above it is clear that F. A. Quenstedt did not erect a genus *Bicornes*, as pointed out by D. V. Ager (1960, p. 161).

3. However, C. Schuchert's and C. M. LeVene's (1929, p. 34) selection of a " genolectotype " might suppose, by definition, the recognition of the genus previously founded by F. A. Quenstedt. But these authors in the introduction to their work (p. 6) admit possible inaccuracy in type-designations. Nevertheless the designation of a known species (*T. livonica* von Buch 1834) as type (even " genolectotype ") of *Bicornes* makes that genus available for the purposes of the Code (Articles 12 & 16(a)(i)) and *Bicornes* could be regarded as a genus established by C. Schuchert & C. M. LeVene with *T. livonica* von Buch, type-species by monotypy.

4. It must be emphasized that *Terebratula livonica* von Buch is a Frasnian (Upper Devonian) species of which the type locality is in Central Latvia, and that the palaeontologists who accept the genus *Bicornes*, consider it to be of Jurassic age.

5. Nothing, either in the " Regles " or the Code allows the way the generic name *Bicornes* Quenstedt has sometimes been used. In consequence, it has never entered the zoological nomenclature in a valid way. D. V. Ager (1965)

has properly eliminated it from Part H of the new Treatise on Invertebrate Paleontology. Also P. Sartenaer (1966, p. 2) felt free to erect the genus *Ripidiorhynchus* Sartenaer, 1966 with *Terebratula livonica* as type-species.

6. However, in view of the fact that C. Schuchert and C. M. LeVene (1929) have inadvertently validated *Bicornes* by designating a " genolectotype " (type-species) and have thus validated it as their own generic name under Articles 12 & 16(a)(i), it will be necessary to suppress this name under the plenary powers in order to conserve *Ripidiorhynchus* Sartenaer 1966 for the Frasnian fossil genus based on *Terebratula livonica* von Buch.

7. The International Commission is requested, in order to avoid the confusion over the name *Bicornes*, to take the following action:

(1) to use its plenary powers to suppress the generic name *Bicornes* Schuchert & LeVene, 1929 for the purposes of the Law of Priority but not for those of the Law of Homonymy;

(2) to place *Bicornes* Schuchert & LeVene, 1929 on the Official Index of Rejected and Invalid Generic Names in Zoology;

(3) to place the generic name *Ripidiorhynchus* Sartenaer, 1966 (gender: masculine) type-species, by original designation, *Terebratula livonica* von Buch, 1834, on the Official List of Generic Names in Zoology;

(4) to place the specific name *livonica* von Buch 1834, as published in the binomen *Terebratula livonica* (type-species of *Ripidiorhynchus* Sartenaer, 1966) on the Official List of Specific Names in Zoology.

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von Buch, L. 1834. Über Terebrateln, mit einem Versuch, sie zu classificiren und zu beschreiben: *Abh. Kön. Ak. Wiss. zu Berlin.*

PROPOSALS FOR STABILIZATION OF THE NAMES OF CERTAIN GENERA AND SPECIES OF HOLOTHURIOIDEA. Z.N.(S.) 1782

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A recent attempt to evaluate the drastic revision and subdivision of *Holothuria* sensu extenso made by Deichmann (1958), which took little regard for earlier attempts at subdivision, uncovered a number of nomenclatorial anomalies which can only be cleared up by resort to the plenary powers of the Commission. In some cases designation of a type-species is enough, but in others suppression of names becomes involved. The present survey is mainly concerned with the various taxa named by Brandt (1835) and Jaeger (1833), but there are also a few others, notably of Selenka (1867), Pearson (1914), H. L. Clark (1922) and, of course, Deichmann (1958). At present we are only prepared to accord subgeneric rank to most of Deichmann's nominal genera, which will need a much more intensive study for a proper assessment of their value.

A. GENUS-GROUP NAMES

1. *Sporadipus* Brandt, 1835. This included two nominal subgenera, *Colpochirota* and *Acolpos*, each with a single species, respectively *ualanensis* Brandt and *maculatus* Brandt. *Sporadipus* has been considered a synonym of *Holothuria* since Selenka so referred it in 1867. Panning (1934–35) used the name in his heading for section B of *Holothuria*, comprising the greater part of the genus, though he gave no comparable name to section A. *Sporadipus maculatus* does fall within his section B (in the synonymy of *H. arenicola*) whereas *ualanensis* does not (being mentioned only in the synonymy of *H.* (*Bohadschia*) *marmorata*). However, Semper (1868) also used the name *Sporadipus* for a group of species within *Holothuria* and *ualanensis* (given as *ualensis*) Brandt *was* included there while *H.* (*Sporadipus*) *maculatus* was referred with a question mark to *Holothuria* sensu stricto. Neither Panning nor Semper made a formal type-designation for *Sporadipus* and in 1939 Panning dropped *Sporadipus* after consultation with Heding. We prefer to follow Semper and to designate *S. ualanensis* as type-species of *Sporadipus*. *Sporadipus* by this move becomes a synonym of *Bohadschia* Jaeger, 1833, *ualanensis* having been found by Ludwig (1881) to be a subjective synonym of *Bohadschia marmorata* Jaeger, the type-species of *Bohadschia* as designated by Pearson (1914, p. 164). Pearson's actual words are ' *Bohadschia*, to which such a form as *Holothuria marmorata* belongs ' but we consider that this had all the intention of a type designation since Pearson followed it up in the same sentence with ' *Thymiosicya*, of which *Holothuria impatiens* may be regarded as the type '. More recently Panning (1939, p. 524) has again designated *marmorata* as type-species of *Bohadschia*.

If *maculatus* were designated as type-species, then *Sporadipus* would threaten *Thymiosicya* Pearson, which we consider has better grounds for recognition, even though as a subgeneric name it has less standing.

As for Brandt's subgeneric names, under Article 44 of the Code, the designation of *ualanensis* as type-species of *Sporadipus* also has the effect of reducing *Colpochirota* to the synonymy of *Sporadipus* and hence of *Bohadschia*, since it automatically becomes the nominate subgenus. *Acolpos*, however, remains available, with type-species, by monotypy, *Sporadipus* (*Acolpos*) *maculatus* Brandt. [In fact Brandt did append the name of a second species, *Holothuria peruviana* Lesson, but this inclusion was only provisional.] In 1867 Selenka, as first reviser, regarded *maculatus* as congeneric with *Holothuria* (*Microthele*) *maculata* Brandt, 1835 and so a secondary homonym; accordingly he proposed the replacement name *H. brandtii* for *Sporadipus maculatus*. [For further remarks on the justification for this action see under the heading of number 4.] In 1868 Semper referred both *maculatus* and *brandtii* to the synonymy of *Holothuria* (now *Bohadschia*) *marmorata* but Ludwig (1881) found from a re-examination of Brandt's type-material that *maculatus* is conspecific rather with *H. arenicola* Semper, 1868. Accordingly Théel (1886) and following authors including Panning (1929) placed *maculatus* in the synonymy of *arenicola* although they still left *brandtii* as a synonym of *B. marmorata*. This is invalid since, under Article 71d of the Code, the type of the replacement nominal species (in this case *brandtii*) must be that of the prior nominal species (*S. maculatus*). Whatever the identity of the specimens which Selenka himself referred to *brandtii*, both names *brandtii* and *maculatus* must refer to a single species. It is unthinkable that the name *maculatus*, around which so much confusion has reigned, or the long disused *brandtii* should replace the very well-known *H. arenicola* and so we request that the Commission use its plenary powers to suppress *brandtii*. Simultaneously we would like to see *Acolpos* rejected since it has chronological priority over both *Thymiosicya* Pearson, 1914 and *Brandtothuria* Deichmann, 1958. According to Pearson the type-species of *Thymiosicya* is *Holothuria* (originally *Fistularia*) *impatiens* (Forskål), 1775. This is closely related to and certainly consubgeneric with *arenicola* Semper, which is the type-species not only of *Acolpos* but also of Deichmann's nominal genus *Brandtothuria*. Since *Thymiosicya* was properly diagnosed by Pearson (even if with characters of which Deichmann disapproved) and a type-species was designated, we consider that the name should be used in place of *Brandtothuria* if a supra-specific category is to be recognised for the *arenicola-impatiens* group of species distinct from *Holothuria* sensu stricto.

2. *Thelenota* Brandt, 1835. With *Microthele* this was proposed by Brandt as a subgenus of *Holothuria*. In 1924 the Commission validated *Holothuria* Linnaeus, 1767, with type-species *H. tremula* Linnaeus, 1767 (non Gunnerus, 1767) = *H. tubulosa* Gmelin, 1790. Since Brandt included *tubulosa* in the subgenus *Thelenota*, under Article 44 this becomes the nominate subgenus and *Thelenota* Brandt a synonym of *Holothuria*. However, H. L. Clark (1921) revived *Thelenota* for type-species *Trepang ananas* Jaeger, 1833, the first species given by Brandt, and referred the genus to the Stichopodidae rather than the Holothuriidae. We request the Commission to exercise its plenary powers to suppress *Thelenota* Brandt for the purposes of the Law of Homonymy in order to validate *Thelenota* H. L. Clark.

Brandt also named two further supra-specific taxa, given as 'sections' within the subgenus *Thelenota* which have no status in nomenclature; these are *Camarosoma* and *Platysoma* Brandt.

3. *Trepang* Jaeger, 1833. H. L. Clark debated whether this generic name should be used for *ananas* in place of *Thelenota* but rejected the idea on the grounds that, if any of the four species included in *Trepang* by Jaeger is to be considered the type-species, this should be the (first-named and) only one of unquestioned inclusion by Jaeger, i.e. *edulis* Lesson; accordingly Dr. Clark formally designated *edulis* as type-species of *Trepang*.

Deichmann was uncertain as to the best position for *edulis* in her subdivision of *Holothuria*, removing it from the *imitans*-group of Panning, which she called *Semperothuria* and placing it near, but not in, the *atra*-group (*Ludwigothuria* Deichmann; *Halodeima* Pearson). These two taxa of Deichmann's are clearly not very well-defined. We incline to the opinion that *edulis* can be regarded as consubgeneric with the *atra*-group, so that *Trepang* could threaten the well-known name *Halodeima*.

The revival of *Trepang* as a scientific name when it has for so long been used only as a general term for edible holothurians, seems very undesirable. Accordingly we request the Commission to exercise its plenary powers to suppress it.

4. *Microthele* Brandt, 1835. This was the second subgenus of *Holothuria* named by Brandt and was established for six of his own species, *maculata*, *dubia*, *tigris*, *sordida*, *Aethiops* and *affinis*, as well as four of Jaeger's species, *fuscocinerea*, *atra*, *fuscopunctata* and *scabra*. All Brandt's nominal species with the exception of *maculata* were either referred to the synonymy of other species or (*sordida*) said to be unrecognisable by Ludwig (1881), followed by Théel (1885) and Panning (1929). We can find no *valid* type-designation for *Microthele* (see below) and accordingly propose that *Holothuria* (*Microthele*) *maculata* Brandt be considered the type-species. As H. L. Clark (1921) has shown, this is a primary homonym of *Holothuria maculata* Chamisso and Eysenhardt (1821), so that the proper name for the species is *nobilis* Selenka, which has already been placed on the Official List (Opinion 762).

[It may be pointed out here that *Holothuria maculata*, Lesueur, 1924 and *H. maculata* Kuhl and van Hasselt, 1869 are also invalidated as junior primary homonyms.]

The designations by Panning (1939) of *H. difficilis* Semper, and by Deichmann (1958) of *H. sanctori* Delle Chiaje, 1823, as type-species of *Microthele* are both invalid since neither nominal species was included in the subgenus by Brandt.

The type-species of *Argiodia* Pearson, 1914, is *H. maculata* Brandt (H. L. Clark having corrected (1921) Pearson's lapsus in designating a non-existent *maculata* (Selenka)). This renders *Argiodia* a synonym of *Microthele*, as stated by Dr. Clark.

5. *Stichopus* Brandt, 1835. This included two nominal subgenera, *Perideris* with the single species *chloronotos* Brandt, and *Gymnochirota* with *cinerascens* Brandt and *leucospilota* Brandt. H. L. Clark (1922) has designated *chloronotus* as type-species of *Stichopus; Perideris* as the nominate subgenus thereby becomes a synonym of *Stichopus*.

We now designate *Stichopus* (*Gymnochirota*) *cinerascens* Brandt as type-species of *Gymnochirota*. Since this species is closely related to, and considered by us to be consubgeneric with, *Holothuria languens* Selenka, the type-species of *Semperothuria* Deichmann, 1958, the latter would become a synonym of *Gymnochirota* unless that is suppressed under the plenary powers, as we now request, the name being long forgotten.

Brandt's second species, *Stichopus* (*Gymnochirota*) *leucospilota* (already placed on the Official List [Opinion 762]) is thus left available to act as type-species of *Mertensiothuria* Deichmann (1958) as designated by Deichmann.

6. *Ludwigothuria* Deichmann, 1958. This is a synonym of *Halodeima* Pearson, 1914, which has the same type-species, *Holothuria atra* Jaeger, 1833, designated by Pearson on p. 164 and again by Panning (1939, p. 524).

7. *Bohadschia* Jaeger, 1833. The type-species is *B. marmorata* Jaeger, 1833, designated by Pearson, 1914 and again by Panning (1939). (See also under no. 1.)

8 & 9. *Actinopyga* Bronn, 1860 and *Mülleria* Jaeger, 1833. *Actinopyga* Bronn was a replacement name for *Mülleria* Jaeger, 1833, non *Mülleria* Férussac, 1823, Mollusca. No type-species was designated by Bronn, though both the species given by Jaeger, *Mülleria echinites* and *lecanora* are mentioned in the text in combination with the generic name *Actinopyga*. In 1914 (p. 164) Pearson designated *Holothuria miliaris* Quoy and Gaimard, 1833, as type-species of *Actinopyga* and an identical designation was made by Panning (1939). However, both these designations are invalid since *H. miliaris* is ineligible, not having been included in *Mülleria* Jaeger. Accordingly we now designate *Mülleria echinites* Jaeger, 1833, as type-species of *Actinopyga* Bronn, 1860.

10. *Fistularia* Forskål, 1775. This is pre-occupied by *Fistularia* Linnaeus, 1758, Pisces.

11. *Cystipus* Haacke, 1880. The type-species by monotypy is *C. pleuripus* Haacke; this was considered by H. L. Clark (1946) to be a synonym of *Stichopus rigidus* Selenka, 1867. Deichmann (1958) designated *rigidus* as type-species of her *Fossothuria*, which therefore becomes a synonym of *Cystipus*.

12. *Ananus* Sluiter, 1881. The type-species by monotypy is *A. holothuroides* Sluiter. According to Théel (1886) this is ' probably a deformed *Holothuria pyxis* or some other species '. We can trace no subsequent use of either generic or specific name and accordingly request that both be suppressed on the grounds of uncertain identity. Sluiter's type specimen should be in the Amsterdam Museum.

13. *Diploperideris* Brandt, 1835. The type-species by monotypy is *D. Sitchaensis* Brandt. Stimpson (1857) referred this to *Holothuria* and Ludwig (1881) to *Stichopus* after examining one of Brandt's type specimens which he said was immature; Théel (1886) also included it under *Stichopus* but commented that it is unsatisfactorily known. H. L. Clark (1922) noted that lack of measurements of spicules prevents identification. In view of this uncertainty, we request that both *Diploperideris* and *sitchaensis* be suppressed.

14. *Eostichopus* Deichmann, 1958. This is a *nomen nudum*, no type-species having been designated, as pointed out to Dr. Deichmann at the time in a letter.

15. *Cuvieria* Peron *in* Cuvier, 1817. This is pre-occupied by *Cuvieria* Peron, 1807, Medusae.

16. *Cladodactyla* Brandt, 1835. Brandt included two sub-genera, *Polyclados* and *Holigoclados*. Panning (1949) lists *Holothuria crocea* Lesson, 1830, as type-species of *Cladodactyla*. Since *crocea* comes within *Polyclados* this is the nominate subgenus and becomes a synonym of *Cladodactyla*. As for *Holigoclados*, of the six species included by Brandt, only one was not prefixed by a question mark; this is *C.* (*Holigoclados*) *albida* Brandt, which is clearly the most eligible to be the type-species, as we now formally designate it. No type-material could be found for Ludwig (1881) evidently, though he referred the species to *Cucumaria*. H. L. Clark (1901) commented that *albida* ' is perhaps identical with *populifer* (Stimpson) '. In view of this doubtful situation, we request that the Commission suppress both *Holigoclados* and *C.* (*Holigoclados*) *albida* Brandt.

17 & 18. *Thyonidium* Düben and Koren, 1845(?) and *Duasmodactyla* Ayres, 1856. The earliest date of publication of *Thyonidium* is controversial; two papers of Düben and Koren appear in the *K. svenska Vetensk.-Akad. Handl.* for 1844 with the publication date, 1846, at the bottom of the title page, which is supported by M. Sars' reference in 1861 to Düben and Koren, 1846, as appearing 15 years earlier. Nevertheless, subsequent authors, including Semper (1868), Théel (1886), Fisher (1907), Mortensen (1927), Deichmann (1938) and Heding and Panning (1954), as well as Sherborn in his *Index Animalium*, give the date of *Thyonidium* as 1844. Synopses of Düben and Koren are given not only in the *Öfvers. K. Vetensk.-Akad. Förh.* for 1844 and 1845, dated respectively 1845 and 1846 on the title pages, but also in the *Arch. skand. Beitr. Naturgesch.*, pt. 1, dated 1845. It may be significant that in neither synopsis of the first paper (on holothurian skeletons) was the generic name *Thyonidium* used, instead the two species included were both referred to in their earlier combinations with *Cucumaria*, as if to avoid premature publication of the name without a diagnosis; the synopses of the second, systematic, paper inevitably included *Thyonidium* and may antedate the main paper. One of these papers almost certainly was published in 1845 (if not 1844) so that *Thyonidium* antedates *Orcula* Troschel, 1846. The two papers by Düben and Koren in the *K. svenska Vetensk.-Akad. Handl.* for 1844 are consecutive, ' Om Holothuriernas Hudskellet ' is on pp. 221–228 and ' Öfversight af Skandinaviens Echinodermer ' on pp. 229–328. *Thyonidium* is given as ' gen. nov.' and diagnosed on p. 303 in the second paper, with two species included, *Holothuria pellucida* Vahl, 1806, (with *Cucumaria hyalina* Forbes, 1841 in synonymy) and *Cucumaria communis* Forbes, 1841, in that order. However, both species are mentioned in the first paper in combination with the generic name *Thyonidium*, *commune* on p. 214 and *pellucidum* on p. 217. [As detailed below under B.33, *H. pellucida* Vahl is based on an apodan and not a dendrochirote, unlike *H. pellucida* Fleming, 1828, which is the species and authority given by subsequent authors in respect of *Thyonidium*, disregarding Forbes' replacement name *Cucumaria hyalina*.] The first designation of a type-species for *Thyonidium* is Fisher's (1907, p. 711), naming *T. commune* Forbes with reference to p. 214 of Düben and Koren, 1846, which does appear to have page priority. Until 1936 the two species were considered as

congeneric and were often both referred to *Phyllophorus* but Heding (1936) emphasized that the number of tentacles (15 or 20) is different and retained *commune* doubtfully in *Phyllophorus* while designating *pellucidum* as type-species of *Thyonidium*. In 1942 Heding revived the name *Duasmodactyla* Ayres, 1856, type-species, by monotypy, *D. productum* Ayres, which had been recognised by Deichmann (1930) as a synonym of (*Phyllophorus*) *commune*. Heding and Panning (1954) in their monographic work on the Phyllophoridae again name *pellucidum* as type-species of *Thyonidium* and *commune* as type-species of *Duasmodactyla*, disregarding Fisher's earlier type-designation for *Thyonidium* although they refer to his paper.

If Fisher's prior type-designation is followed, then *Duasmodactyla* would become a synonym of *Thyonidium*, type-species *T. commune*, and another generic name would need to be found for *Holothuria pellucida*. Such a name is available; this is *Orcula* Troschel, 1846, type-species by monotypy, *O. barthi* Troschel, which is considered to be congeneric with *pellucidum* by Heding and Panning.

This change around would be most confusing. In order to preserve the currently accepted terminology—that of the definitive work on the family Phyllophoridae by Heding and Panning—the Commission would need to exert its plenary powers to set aside Fisher's designation in 1907 of *Cucumaria communis* Forbes, 1841, as type-species of *Thyonidium* and designate *pellucidum* as type-species.

Both the specific names involved also have nomenclatorial complications: these are dealt with under section B, numbers 32 and 33.

19. *Dactylota* Brandt, 1835. Brandt included the following four species: *Holothuria laevis* and *minuta*, both of Fabricius, 1780, and *H. pellucida* and *inhaerens*, both of O. F. Müller, 1776. We now designate the first, *D. laevis*, as type-species. This is congeneric with *Chiridota discolor* Eschscholtz, the type-species of *Chiridota* Eschscholtz, 1829, to the synonymy of which H. L. Clark has already (1907) referred *Dactylota*.

20. *Aspidochir* Brandt, 1835. The type-species by monotypy is *A. Mertensii* Brandt. This was said to be probably referable to *Chiridota* by Ludwig (1881), for whom evidently no type-material could be found. In view of the uncertainty we request that the Commission suppress both *Aspidochir* and *A. Mertensii*.

21. *Liosoma* Brandt, 1835. The type-species by monotypy is *L. Sitchaense* Brandt. No type-material was forthcoming for Ludwig (1881) but he considered it identical with *Chiridota discolor* Eschscholtz, which synonymy was followed by H. L. Clark (1907). *Liosoma* is therefore a synonym of *Chiridota*.

22. *Oncinolabes* Brandt, 1835. This includes two species, *fuscescens* and *mollis*, both of Brandt. We now designate the first, *fuscescens*, as type-species of *Oncinolabes*. According to Ludwig (1881) after study of type-material, this is synonymous with *Synapta beselii* Jaeger, 1833, which is itself included in the synonymy of *S. maculata* (Chamisso and Eysenhardt), 1821 by H. L. Clark (1907) and subsequent authors. *Oncinolabes* is therefore reduced to the synonymy of *Synapta* and cannot threaten *Opheodesoma* Fisher, 1907, as it would if *mollis* were named as type-species. Ludwig (1881) considered that

mollis, of which no type-material was available, could be conspecific with *Synapta glabra* Semper, 1868, which is congeneric with *Opheodesoma spectabilis* Fisher, the type-species of *Opheodesoma*. Even so, it is desirable that *mollis* be suppressed in order not to invalidate the better-known name *Opheodesoma glabra* (Semper).

23. *Tiedemannia* Leuckardt, 1830. The type-species, by monotypy, is *Fistularia vittata* Forskål, 1775, from Suez. This has since been recorded a number of times, notably by Lampert (1885) and Ludwig (1886), the latter relating it to *Synapta indivisa* and *recta* Semper, since referred to *Synaptula*, but H. L. Clark (1907) in his discussion of *Synaptula* considers that none of these records is likely to be based on material conspecific with Forskål's and accordingly notes that both *Tiedemannia* and *Fistularia vittata* should be discarded.

B. SPECIES-GROUP NAMES FOR SUPPRESSION

1. *Holothuria* (*Microthele*) *Aethiops* Brandt, 1835. According to Ludwig (1881) the type-material is lost. Nevertheless he regards it as conspecific with *Holothuria pulla* Selenka, 1867, which is the name in current use though threatened if *aethiops* is not suppressed.

The following names were included by Théel (1886) under the heading of *Holothuria* (sensu extenso) as being ' mostly very incompletely known and in need of re-examination '. No such re-examination having occurred, we now propose all of them for suppression:

2. *Holothuria agglutinata* Lesueur, 1824 (referred to *Bohadschia* by Verrill, 1867–71).

3. *Bohadschia albiguttata* Jaeger, 1833.

4. *Holothuria brunnea* Chamisso and Eysenhardt, 1821. [It may be pointed out here that *Holothuria brunnea* Forbes *in* Thompson, 1840, p. 100, subsequently referred to *Ocnus* by Forbes (1841), is a primary homonym].

5. *Holothuria Cavolini* Delle Chiaje, 1823 (? a synonym of *Stichopus regalis* (Cuvier) according to Semper, 1868).

6. *Holothuria fasciata* Lesueur, 1824 (referred to *Bohadschia* by Verrill, 1867–71).

[It may be pointed out here that *Holothuria fasciata* Quoy and Gaimard, 1833, is a primary homonym; this too was given by Théel as incompletely known and Cherbonnier (1952) notes that the type is lost.]

7. *Sporadipus gigas* Oersted. We cannot trace a published mention of this name by Oersted, though it is listed by Verrill (1867) and Théel (1886) quoting Verrill's date. Possibly it is an invalid manuscript name.

8. *Holothuria heros* L. Agassiz, 1852.

9. *Bohadschia lineolata* Jaeger, 1833.

10. *Fistularia maxima* Forskål, 1775.

11. *Holothuria monosticha* Haacke, 1880.

12. *Holothuria obscura* Lesueur, 1824.

13. *Holothuria* (*Microthele*) *sordida* Brandt, 1835 (Type not found for Ludwig, 1881).

Théel also included the following six names of Risso, 1826, with the comment that ' some of them are probably not Holothurids but belong to other groups of animals ':

14. *Holothuria glaberrima.*
15. *Holothuria littoralis.*
16. *Holothuria mammillata.*
17. *Holothuria ovata.*
18. *Holothuria punctata.*
19. *Holothuria stellata.*

The first of these, *H. glaberrima* Risso, also needs to be suppressed under the Law of Homonymy since it invalidates *Holothuria glaberrima* Selenka, which has been widely used for a circum-tropical species.

Théel further listed a number of nominal species originally referred to *Holothuria* but clearly not members of the Aspidochirota under headings of species incompletely or unsatisfactorily known and needing re-examination:

20. *Holothuria dissimilis* Fleming, 1828. A *Cucumaria* according to Théel (1886); an unidentifiable Cucumariid according to Mortensen (1927).

21. *Holothuria lapidifera* Lesueur, 1824. An *Orcula* or possibly another genus according to Théel (1886); ? *Phyllophorus* according to Verrill (1867).

22. *Holothuria minuta* Fabricius, 1780. A *Pentacta* according to Jaeger (1833), *Dactylota* according to Brandt (1835), *Ocnus* according to Semper (1868) and *Cucumaria* according to Théel (1886), who placed it among the unsatisfactorily known species. It has not been contemporaneously considered congeneric with *Colochirus minutus* Ludwig, 1875, which was referred to *Pentacta* by H. L. Clark in 1932. Nevertheless, it could threaten the latter as a senior secondary homonym and its suppression is desirable.

23. *Holothuria Neillii* Fleming, 1828. A *Cucumaria* according to Théel (1886); unidentifiable according to Mortensen (1927).

24. *Holothuria pusilla* M. Sars, 1828. A *Cucumaria* according to Théel (1886).

25. *Holothuria tetraquetra* Delle Chiaje, 1828. A *Cucumaria* according to Théel (1886).

26. *Holothuria tentaculata* Forster *in* Blainville, 1821. A *Synapta* close to *S. beselii* [*maculata*] according to Théel (1886); possibly referable to *S. maculata* but ' impossible to say positively ', according to H. L. Clark (1907).

There are also a few other, possibly controversial, cases, including the following:

27. *Cladodactyla nigricans* Brandt, 1835. According to Ludwig (1881) this is probably conspecific with *Cucumaria piperata* Stimpson, 1864, which name has been used in preference by other authors, notably H. L. Clark (1901). Although a type-specimen was available for Ludwig to study, he left the status of Brandt's species still uncertain and it would be better suppressed.

28—30. *Colochirus viridis* Semper, 1868, *C. colloradiatus* and *C. propinquus* Haacke, 1880. These were listed as insufficiently known by Théel (1886) and have not since been recorded. Haacke's type material of the two last could not be traced in the Kiel Museum for Ludwig (1883).

31. *Cuvieria Sitchaensis* Brandt, 1835. No type-material could be found for Ludwig (1881), nevertheless he reckoned that it is conspecific with *Psolus fabricii*. Since the latter was a replacement name for *Holothuria squamata* Fabricius, 1780 *non* O. F. Müller, 1776, and dates only from Düben and Koren, 1846 (not Lütken as given by Ludwig), we request that *C. sitchaensis* be suppressed in order that the well-known and widely-used name *P. fabricii* Düben and Koren should not be invalidated.

32. *Holothuria Drummondii* Thompson, 1840. Düben and Koren (1846) referred *drummondii:* Forbes, 1841 to *Thyonidium* and included *Cucumaria communis* Forbes, 1841, in the synonymy; they made no mention of *H. Drummondii* Thompson but Selenka (1867) followed by Semper (1868) and Théel (1886) give Thompson as the author of *T. drummondii*. However, Mortensen (1927) commented that ' the name *drummondii* ought not to be used, as it is quite impossible to say to which species the original description really refers. The form described by Forbes under that name is certainly not a *Thyonidium* '. A similar comment was made by Deichmann (1930). Heding (1942) and Heding and Panning (1954) refer *commune* to *Duasmodactyla* and in the second paper list *drummondii* Thompson in the synonymy. It therefore seems advisable to request the suppression of *Holothuria Drummondii* Thompson, 1840 in order not to invalidate *Cucumaria communis* Forbes, 1841.

33. *Holothuria pellucida* Vahl *in* O. F. Müller, 1806. This was regarded by Selenka and subsequent authors as an apodan conspecific with *Holothuria laevis* Fabricius, 1780. However, Heding, in 1935, revived it as a valid species of *Chiridota*, distinct from *C. laevis*. In 1828 Fleming referred some specimens from the Shetland Islands to *Holothuria pellucida* O. F. Müller (i.e. Vahl), giving a very brief diagnosis not differing significantly from Vahl's. Forbes (1841) pointed out that Fleming's material was probably not conspecific with Müller's and proposed the replacement name *Cucumaria hyalina*. In 1846 (? '45, see A.17 & 18) Düben and Koren described the new dendrochirote genus *Thyonidium* and referred to it two species, *Cucumaria communis* Forbes and *Holothuria pellucida* Vahl with *C. hyalina* Forbes in the synonymy; clearly their knowledge of the species derived more from Forbes than from Vahl. Semper (1868), followed by Théel (1886) and others, names Fleming as author of *Thyonidium pellucidum*, which completely disregards the rules, and *hyalina* Forbes has since remained unused. Although Heding avoided pointing out Düben and Koren's misidentification of *H. pellucida* Vahl, his action in first reviving it for an apodan (1935) and then (1936) in designating ' *Thyonidium pellucidum* Düben and Koren ' as type-species of *Thyonidium*, shows clearly that he was employing deliberate use of mis-identification. Unfortunately *pellucidum* Düben and Koren is still antedated by *Cucumaria hyalina* Forbes, 1841. There is much justification for adopting Forbes' name but it would cause considerable confusion. Accordingly we request the Commission to exert its plenary powers to suppress *hyalina* and to validate *Thyonidium pellucidum* from Düben and Koren, 1845.

34 & 35. *Fistularia punctulata* and *tenuis* Quoy and Gaimard, 1833. These are mentioned under the generic headings of respectively *Synapta* and *Chiridota* by Cherbonnier (1952) in his revision of the type-material of Quoy

and Gaimard. However, he was doubtful about the true identity of both of them since all the relevant type-material was lost.

36 & 37. *Chiridota verrucosa* and *lumbricoides* Eschscholtz, 1829. H. L. Clark (1907) considers that there is insufficient evidence to determine the identity of either of these nominal species, which would therefore be better suppressed.

The following specific names have already been proposed for suppression under section A of this paper:

38. *Holothuria Brandtii* Selenka, see A. 1.
39. *Ananus holothuroides* Sluiter, see A. 12.
40. *Diploperiderix Sitchaensis* Brandt, see A. 13.
41. *Cladodactyla* (*Holigoclados*) *albida* Brandt, see A. 16.
42. *Aspidochir Mertensii* Brandt, see A. 20.
43. *Oncinolabes mollis* Brandt, see A. 22.
44. *Fistularia vittata* Forskål, see A. 23.

The problem of *Holothuria umbrina* Rüppel & Leuckart, and *H. monacaria* and *hilla* Lesson and *H. gyrifer* Selenka will be dealt with in a future submission.

SUMMARY OF THE NOMINAL TAXA INCLUDED BY BRANDT

Brandt's Name	*Present disposition*
Genus *Cladodactyla* Br.	valid
Subgenus *Polyclados* Br.	syn. of *Cladodactyla*
crocea (Lesson)	valid; Type-species of *Cladodactyla*
miniata Br.	valid
nigricans Br.	proposed for suppression
Subgenus *Holigoclados* Br.	proposed for suppression
albida Br.	proposed for suppression
Genus *Dactylota* Br.	syn. of *Chiridota*, H. L. Clark, 1907.
laevis (Fab.)	des. T-sp. of *Dactylota;* to *Chiridota*
minuta (Fab.)	proposed for suppression
pellucida (O.F.M.)	proposed for suppression
inhaerens (O.F.M.)	valid; to *Leptosynapta*
Genus *Aspidochir* Br.	proposed for suppression
Mertensii Br.	proposed for suppression
Genus *Sporadipus* Br.	syn. of *Bohadschia*
Subgenus *Colpochirota* Br.	syn. of *Bohadschia*
ualanensis Br.	syn. of *B. marmorata*, Ludwig, 1881
Subgenus *Acolpos* Br.	proposed for suppression
maculatus Br.	homonym; des. T-sp.; =*H. arenicola*
Genus *Psolus* Oken	valid
pantapus (O.F.M.)	valid; *phantapus* Strussenfeldt
appendiculatus (Blainville)	valid
Genus *Cuvieria* Peron	homonym of *Cuvieria* Peron, 1807 =*Psolus* Oken
Sitchaensis	proposed for suppression

Brandt's name	*Present disposition*
Genus *Oncinolabes* Br.	syn. of *Synapta*
fuscescens Br.	des. T-sp.; syn. of *S. maculata*, H.L.C. 1907
mollis Br.	proposed for suppression
Genus *Stichopus* Br.	valid
Subgenus *Perideris* Br.	syn. of *Stichopus*
chloronotos Br.	valid; des. T-sp., H.L.C., 1922
Subgenus *Gymnochirota* Br.	proposed for suppression
cinerascens Br.	valid; to *Holothuria* (*Semperothuria*)
leucospilota Br.	valid; to *Holothuria* (*Mertensiothuria*)
Genus *Diploperideris* Br.	proposed for suppression
Sitchaensis Br.	proposed for suppression
Genus *Holothuria* Linn.	validated, 192-
Subgenus *Thelenota* Br.	syn. of *Holothuria*
(*Thelenota* H.L.C., 1921	proposed for validation)
section *Camarosoma* Br.	unavailable
tubulosa Tied.	valid, *tubulosa* Gmelin; T-sp.
elegans O.F.M.	syn. of *Stichopus tremulus*, Düben & Koren, 1846 (?1844)
impatiens Forsk.	valid
umbrina Rüppel & Leuckart	doubtful; subject of future submission
quadrangularis Lesson	valid; to *Pentacta*
ananas (Jaeger)	valid; T-sp. of *Thelenota*, H.L.C., 1922
section *Platysoma* Br.	unavailable
grandis Br.	syn. of *T. ananas*, Ludwig, 1881
? *Holothuria monacaria* Lesson	subject of future submission
Subgenus *Microthele* Br.	proposed for validation
maculata Br.	homonym; des. T-sp.; =*nobilis*
dubia Br.	syn. of *Actinopyga lecanora*, Ludwig, 1881
tigris Br.	proposed for suppression
sordida Br.	proposed for suppression
Aethiops Br.	proposed for suppression
affinis Br.	syn. of *H. atra*, Ludwig, 1881
fuscocinerea Jaeger	valid: to *Holothuria* (*Mertensiothuria*)
atra Jaeger	valid; to *Halodeima*
fuscopunctata Jaeger	valid; to *Holothuria* (*Jaegerothuria*)
scabra Jaeger	valid: to *Holothuria* (*Theelothuria*)
Genus *Bohadschia* Jaeger	valid
marmorata Jaeger	valid; des. T-sp., Pearson, 1914
ocellata Jaeger	valid; to *Holothuria*
argus Jaeger	valid
lineolata Jaeger	proposed for suppression
albiguttata Jaeger	proposed for suppression

Brandt's name	*Present disposition*
Genus *Mülleria* Jaeger	homonym; = *Actinopyga* Bronn, 1860
echinites Jaeger	valid; to *Actinopyga;* des. T-sp.
lecanora Jaeger	valid; to *Actinopyga*
Genus *Trepang* Jaeger	proposed for suppression
edulis Jaeger	valid; T-sp.; to *Halodeima*
Genus *Cladolabes* Br.	valid
limaconotos Br.	valid; des. T-sp., Heding & Panning, 1954
Genus *Liosoma* Br.	syn. of *Chiridota,* H. L. Clark, 1907
Sitchaense Br.	syn. of *Chiridota discolor,* Ludwig, 1881
Genus *Chiridota* Eschscholtz	valid
rufescens Br.	valid; to *Polycheira*
discolor Esch.	valid; des. T-sp., H. L. Clark, 1907
verrucosa Esch.	proposed for suppression
lumbricoides Esch.	proposed for suppression
purpurea Lesson	valid; to *Trochodota*
Genus *Synapta* Eschscholtz	valid
mamillosa Esch.	syn. of *S. maculata,* H. L. Clark, 1907
oceanica Lesson	valid

As a consequence of all this, the International Commission is requested:

(1) to use its plenary powers to suppress for the purposes of the Law of Priority but not for those of the Law of Homonymy the following genus-group names:
   (a) *Acolpos* Brandt, 1835;
   (b) *Trepang* Jaeger, 1833;
   (c) *Gymnochirota* Brandt, 1835 (subgenus of *Stichopus*);
   (d) *Ananus* Sluiter, 1881;
   (e) *Diploperideris* Brandt, 1835;
   (f) *Holigoclados* Brandt, 1835 (subgenus of *Cladodactyla*);
   (g) *Aspidochir* Brandt, 1835;
   (h) *Tiedemannia* Leuckardt, 1830.

(2) to use its plenary powers to suppress for the purposes of the Law of Priority but not for those of the Law of Homonymy the following specific names:
   (a) *brandtii* Selenka, 1867, as published in the binomen *Holothuria Brandtii;*
   (b) *holothuroides* Sluiter, 1881, as published in the binomen *Ananus holothuroides;*
   (c) *sitchaensis* Brandt, 1835, as published in the binomen *Diploperideris Sitchaensis;*
   (d) *albida* Brandt, 1835, as published in the binomen *Cladodactyla albida;*
   (e) *mertensii* Brandt, 1835, as published in the binomen *Aspidochir Mertensii;*

(f) *mollis* Brandt, 1835, as published in the binomen *Oncinolabes mollis;*
(g) *vittata* Forskål, 1775, as published in the binomen *Fistularia vittata;*
(h) *aethiops* Brandt, 1835, as published in the binomen *Holothuria Aethiops;*
(i) *agglutinata* Lesueur, 1824, as published in the binomen *Holothuria agglutinata;*
(j) *albiguttata* Jaeger, 1833, as published in the binomen *Bohadschia albiguttata;*
(k) *brunnea* Chamisso and Eysenhardt, 1821, as published in the binomen *Holothuria brunnea;*
(l) *cavolini* Delle Chiaje, 1823, as published in the binomen *Holothuria Cavolini;*
(m) *fasciata* Lesueur, 1824, as published in the binomen *Holothuria fasciata;*
(n) *gigas* Oersted, 1867, as published in the binomen *Sporadipus gigas;*
(o) *heros* L. Agassiz, 1852, as published in the binomen *Holothuria heros;*
(p) *lineolata* Jaeger, 1833, as published in the binomen *Bohadschia lineolata;*
(q) *maxima* Forskål, 1775, as published in the binomen *Fistularia maxima;*
(r) *monosticha* Haacke, 1880, as published in the binomen *Holothuria monosticha;*
(s) *obscura* Lesueur, 1824, as published in the binomen *Holothuria obscura;*
(t) *sordida* Brandt, 1835, as published in the binomen *Holothuria sordida;*
(u) *glaberrima* Risso, 1826, as published in the binomen *Holothuria glaberrima;*
(v) *littoralis* Risso, 1826, as published in the binomen *Holothuria littoralis;*
(w) *mammillata* Risso, 1826, as published in the binomen *Holothuria mammillata;*
(x) *ovata* Risso, 1826, as published in the binomen *Holothuria ovata;*
(y) *punctata* Risso, 1826, as published in the binomen *Holothuria punctata;*
(z) *stellata* Risso, 1826, as published in the binomen *Holothuria stellata;*
(a′) *dissimilis* Fleming, 1828, as published in the binomen *Holothuria dissimilis;*
(b′) *lapidifera* Lesueur, 1824, as published in the binomen *Holothuria lapidifera;*
(c′) *minuta* Fabricius, 1780, as published in the binomen *Holothuria minuta;*
(d′) *neillii* Fleming, 1828, as published in the binomen *Holothuria Neillii;*

(e′) *pusilla* M. Sars, 1828, as published in the binomen *Holothuria pusilla;*

(f′) *tetraquetra* Delle Chiaje, 1828, as published in the binomen *Holothuria tetraquetra;*

(g′) *tentaculata* Forster, 1821, as published in the binomen *Holothuria tentaculata;*

(h′) *nigricans* Brandt, 1835, as published in the binomen *Cladodactyla nigricans;*

(i′) *viridis* Semper, 1868, as published in the binomen *Colochirus viridis;*

(j′) *colloradiatus* Haacke, 1880, as published in the binomen *Colochirus colloradiatus;*

(k′) *propinquus* Haacke, 1880, as published in the binomen *Colochirus propinquus;*

(l′) *sitchaensis* Brandt, 1835, as published in the binomen *Cuvieria Sitchaensis;*

(m′) *drummondii* Thompson, 1840, as published in the binomen *Holothuria Drummondii;*

(n′) *hyalina* Forbes, 1841, as published in the binomen *Cucumaria hyalina;*

(o′) *punctulata* Quoy and Gaimard, 1833, as published in the binomen *Fistularia punctulata;*

(p′) *tenuis* Quoy and Gaimard, 1833, as published in the binomen *Fistularia tenuis;*

(q′) *verrucosa* Eschscholtz, 1829, as published in the binomen *Chiridota verrucosa;*

(r′) *lumbricoides* Eschscholtz, 1829, as published in the binomen *Chiridota lumbricoides.*

(3) to use its plenary powers to suppress for the purposes of the Law of Homonymy:

(a) the generic name *Thelenota* Brandt, 1835 (a junior synonym of *Holothuria*);

(b) the specific name *glaberrima* Risso, 1826, as published in the binomen *Holothuria glaberrima* (suppressed for the purposes of the Law of Priority under (2) (u) above).

(4) to use its plenary powers to validate the specific name *pellucidum* Düben and Koren, 1845, as published in the binomen *Thyonidium pellucidum*, as a name distinct from *Holothuria pellucida* Vahl, 1806, even though Düben and Koren had no intention of publishing a new name.

(5) to use its plenary powers to set aside all designations of type-species, made prior to the Ruling now requested, for the nominal genus *Thyonidium* Düben and Koren, 1845, and having done so to designate *Thyonidium pellucidum* Düben and Koren, 1845, to be the type-species of that genus.

(6) to place the names suppressed under the plenary powers in (1) (2) and (3) above on the appropriate Official Lists of Rejected and Invalid Names in Zoology.

(7) to place the following generic names on the Official List of Generic Names in Zoology:

(a) *Thelenota* H. L. Clark, 1922 (p. 48) (gender : neuter), type-species, by original designation, *Trepang ananas* Jaeger, 1833;

(b) *Synapta* Eschscholtz, 1829 (p. 12) (gender : feminine), type-species, by designation by H. L. Clark (1907, p. 22), *Holothuria maculata* Chamisso and Eysenhardt, 1821;

(c) *Microthele* Brandt, 1835 (p. 54) (gender : masculine), type-species, by present designation, *Holothuria* (*Microthele*) *maculata* Brandt, 1835, invalid, replaced by *H. nobilis* Selenka, 1867 (already placed on the Official List—No. 2112);

(d) *Stichopus* Brandt, 1835 (p. 50) (gender : masculine), type-species, by designation by H. L. Clark (1922), *Stichopus chloronotos* Brandt, 1835;

(e) *Halodeima* Pearson, 1914 (p. 164) (gender : feminine), type-species, by original designation, *Holothuria atra* Jaeger, 1833;

(f) *Bohadschia* Jaeger, 1833 (p. 18) (gender : feminine), type-species, by designation by Pearson (1914), *B. marmorata* Jaeger, 1833;

(g) *Actinopyga* Bronn, 1860 (p. 403) (gender : feminine), type-species, by present designation, *Muelleria echinites* Jaeger, 1833;

(h) *Thyonidium* Düben and Koren, 1845 (p. 214) (gender : neuter), type-species, by designation under the plenary powers in (5) above, *Thyonidium pellucidum* Düben and Koren, 1845;

(i) *Duasmodactyla* Ayres, 1856 (p. 244) (gender : neuter), type-species, by monotypy, *Duasmodactyla productum* Ayres, 1856;

(j) *Chiridota* Eschscholtz, 1829 (p. 12) (gender : feminine), type-species, by designation by Fisher (1907), *Chiridota discolor* Eschscholtz, 1829;

(k) *Labidodemas* Selenka, 1867 (p. 309) (gender : neuter), type-species, by monotypy, *Labidodemas semperianum* Selenka, 1867.

(8) to place the following specific names on the Official List of Specific Names in Zoology:

(a) *arenicola* Semper, 1868, as published in the binomen *Holothuria arenicola;*

(b) *ananas* Jaeger, 1833, as published in the binomen *Trepang ananas* (type-species of *Thelenota* Clark, 1922);

(c) *maculata* Chamisso and Eysenhardt, 1821, as published in the binomen *Holothuria maculata* (type-species of *Synapta* Eschscholtz, 1829);

(d) *chloronotos* Brandt, 1835, as published in the binomen *Stichopus chloronotos* (type-species of *Stichopus* Brandt, 1835);

(e) *atra* Jaeger, 1833, as published in the binomen *Holothuria atra* (type-species of *Halodeima* Pearson, 1914);

(f) *marmorata* Jaeger, 1833, as published in the binomen *Bohadschia marmorata* (type-species of *Bohadschia* Jaeger, 1833);

(g) *miliaris* Quoy and Gaimard, 1833, as published in the binomen *Holothuria miliaris;*

(h) *echinites* Jaeger, 1833, as published in the binomen *Muelleria echinites* (type-species of *Actinopyga* Bronn, 1860);

(i) *pellucidum* Düben and Koren, 1845, as published in the binomen *Thyonidium pellucidum* (type-species of *Thyonidium* Düben and Koren, 1845);

(j) *communis* Forbes, 1841, as published in the binomen *Cucumaria communis;*

(k) *discolor* Eschscholtz, 1829, as published in the binomen *Chiridota discolor* (type-species of *Chiridota* Eschscholtz, 1829);

(l) *pulla* Selenka, 1867, as published in the binomen *Holothuria pulla;*

(m) *glaberrima* Selenka, 1867, as published in the binomen *Holothuria glaberrima;*

(n) *minutus* Ludwig, 1875, as published in the binomen *Colochirus minutus;*

(o) *piperata* Stimpson, 1864, as published in the binomen *Cucumaria piperata;*

(p) *semperianum* Selenka, 1867, as published in the binomen *Labidodemas Semperianum* (type-species of *Labidodemas* Selenka, 1867).

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CRIOCERIS MÜLLER, 1764 AND *LEMA* FABRICIUS, 1798 (INSECTA, COLEOPTERA): PROPOSED DESIGNATION OF TYPE-SPECIES UNDER THE PLENARY POWERS. Z.N.(S.) 1786

By B. J. Selman (*University of Newcastle-upon-Tyne, England*) and R. F. Smith (*University of California, Berkeley, U.S.A.*)

This application is being submitted to the Commission in order to clarify and to stabilize the generic names *Crioceris* Muller, *Lema* Fabricius and *Lilioceris* Reitter of the family Chrysomelidae, Order Coleoptera, Class Insecta.

The History of the Names

1. The name *Crioceris* was first used by Geoffroy (1762), *Hist. ins. Paris* **1** : 137. Together with his generic description Geoffroy included seven species, three of them Linnaean. The Linnaean species were *Chrysomela merdigera* Linnaeus, *Chrysomela asparagi* Linnaeus and two not quoted in the binomial manner but which tally with *Chrysomela cyanella* Linnaeus and *Chrysomela melanopus* Linnaeus of the 10th edition of the *Systema Natura* of Linnaeus. Geoffroy's work was invalidated by the Commission in 1954 (Opinion 228, *Ops. Decls. int. Comm. zool. Nomencl.* **4** : 211–220). Müller (1764 *Fauna insecta Fridrich* p. xiii) made the first valid description of the genus *Crioceris* but included no species. Schaeffer (1766 *Elem. Entomol.* pl. 52) and Eberhard (1768 *Versuch.* p. 199, 224) next used the name *Crioceris* but neither work is binomial. Linnaeus (1767) failed to mention the genus or to refer to Geoffroy, Muller or Schaeffer. Fabricius (1775, *Syst. Ent.* p. 118) used the name *Crioceris* and was the first author to include species in the genus. He listed 23 species of *Crioceris* among which were *Chrysomela merdigera* Linnaeus and *Chrysomela asparagi* Linnaeus. Degeer (1775, *Mem.* **5**) also used *Crioceris* and includes amongst other species *Chrysomela merdigera* Linnaeus and *Chrysomela asparagi* Linnaeus.

Latreille (1804 in Illiger, *Mag. f. Insekt.* **3** : 123) cites " *Lema merdigera Fab.*" as the example for *Crioceris*. Latreille's *Lema merdigera* Fab. is clearly a synonym for *Chrysomela merdigera* Linnaeus. Latreille (1810, *Consid. gen.:* 432) clearly designates *Chrysomela merdigera* Linnaeus as the type of the genus *Crioceris*. Subsequently, the following authors cited *Chrysomela merdigera* Linnaeus as the type-species of *Crioceris:* Westwood (1838), Blanchard (1845) and Jacoby (1908). Other species have also been designated as type-species: *Chrysomela asparagi* Linnaeus (Curtis 1830), *Crioceris duotuberculata* Fabricius (Hope 1840) and *Chrysomela duodecimpunctata* Linnaeus (Crotch 1870). These are clearly invalid designations. Thus *Chrysomela merdigera* Linnaeus is undoubtedly the type-species of *Crioceris*. However, modern authors without exception have taken *Chrysomela asparagi* Linnaeus to be the type-species of *Crioceris*.

2. In 1912 Reitter described the genus *Lilioceris* and placed in it the species *Attelabus lilii* Scopoli, *Chrysomela merdigera* Linnaeus and *Crioceris tibialis* Villa. Reitter did not designate a type-species for the genus. Chujo (1951)

designated *Attelabus lilii* Scopoli as the type-species of *Lilioceris*. *Attelabus lilii* is undoubtedly congeneric with *Chrysomela merdigera* the type-species of the genus *Crioceris*. Therefore *Lilioceris* is a junior synonym of *Crioceris*. As has already been explained, modern authors thought that *Chrysomela asparagi* Linnaeus was the type-species of *Crioceris*. Unfortunately, *Chrysomela asparagi*, though congeneric with the rest of the species at present included in the genus *Crioceris*, is not congeneric with *Chrysomela merdigera*. Therefore *Chrysomela asparagi*, together with the other species at present placed in the genus *Crioceris*, are in a genus without a name.

Unfortunately, this would mean that many important economic pests like *Crioceris asparagi* (Linnaeus) and *Crioceris duodecimpunctata* (Linnaeus), with their vast accompanying economic literature, would need a new generic name. Heinz and Pinsdorf (1962, *Ent. Arb.* **13** : 245) correctly summarised the position of the genus *Lilioceris* but stated that it would be a mistake to synonymise the names *Crioceris* and *Lilioceris* because of the confusion which would be caused.

3. The picture is further complicated by the genus *Lema* Fabricius sensu Lacordaire (1845). This genus was described by Fabricius in 1798 and he placed twenty-six species in it including *Chrysomela merdigera* Linnaeus and *Chrysomela cyanella* Linnaeus. These 26 species include many modern genera of Criocerinae. Indeed most authors in the early part of the 19th century considered *Lema* to be a strict synonym of *Crioceris* and no one designated a type-species. Lacordaire (1845) distinguished between *Crioceris* and *Lema* and published descriptions of the two but did not designate type-species for the genera. This continued until Crotch (1870) designated *Chrysomela merdigera* Linnaeus as the type-species of *Lema*. Thus both *Crioceris* and *Lema* have the same type-species and are isogenotypic synonyms, with *Lema* the junior synonym. Jacoby (1908) overlooked this when he designated *Chrysomela cyanella* Linnaeus as the type-species of *Lema*. Again *Chrysomela merdigera* L. and the species at present included in what was thought to be the genus *Lema*, clearly belong to separate genera. The next available name for this genus is *Petauristes* Latreille (1829), type species *Lema crassipes* Olivier.

Once again we have to change the name of a genus containing more than 1216 species many of them important pests of grassland and cereal crops throughout the world.

4. Therefore *Crioceris* Muller, *Lema* Fabricius, and *Lilioceris* Reitter are synonyms. Under the rules of priority the following changes ensue:

The genus at present called *Lilioceris* Reitter is *Crioceris* Müller, type-species *Chrysomela merdigera* Linnaeus, with the names *Lema* Fabricius and *Lilioceris* Reitter as junior synonyms.

The genus at present called *Lema* Fabricius is *Petauristes* Latreille, type-species *Lema crassipes* Olivier.

The genus at present called *Crioceris* Muller is without a name and thus requires a new one.

It is considered that these changes would bring great confusion to the nomenclatorial status of a large number of important economic species.

5. The International Commission of Zoological Nomenclature is therefore asked to take the following actions:

(1) to use its plenary powers:
  (a) to set aside all designations of type-species for the nominal genus *Crioceris* Müller, 1764, made prior to the Ruling now requested and, having done so, to designate *Chrysomela asparagi* Linnaeus 1758, to be the type-species of that genus;
  (b) to set aside all designations of type-species for the nominal genus *Lema* Fabricius, 1798, made prior to the Ruling now requested and, having done so, to designate *Chrysomela cyanella* Linnaeus, 1758, to be the type-species of that genus;
(2) to place the following generic names on the Official List of Generic Names in Zoology:
  (a) *Crioceris* Müller, 1764 (gender : masculine), type-species, by designation under the plenary powers in (1) above, *Chrysomela asparagi* Linnaeus, 1758;
  (b) *Lema* Fabricius, 1798 (gender : feminine), type-species, by designation under the plenary powers in (1) above, *Chrysomela cyanella* Linnaeus, 1758;
  (c) *Lilioceris* Reitter, 1912 (gender : masculine), type-species, by designation by Chujo, 1951, *Attelabus lilii* Scopoli, 1763;
(3) to place the following specific names on the Official List of Specific Names in Zoology:
  (a) *asparagi* Linnaeus, 1758, as published in the binomen *Chrysomela asparagi* (type-species of *Crioceris* Müller, 1764);
  (b) *cyanella* Linnaeus, 1758, as published in the binomen *Chrysomela cyanella* (type-species of *Lema* Fabricius, 1798);
  (c) *lilii* Scopoli, 1763, as published in the binomen *Attelabus lilii* (type-species of *Lilioceris* Reitter, 1912).

RECEPTACULITES DESHAYES, 1828 (RECEPTACULITIDS): PROPOSED VALIDATION UNDER THE PLENARY POWERS. Z.N.(S.) 1787

By Matthew H. Nitecki (*Field Museum of Natural History, Chicago, Illinois* 60605, *U.S.A.*)

The problem presented in this proposal came to notice during revisionary work on North American receptaculitids. The object of this application is to ask the International Commission on Zoological Nomenclature to use its plenary powers to validate the generic name *Receptaculites* Deshayes 1828, as published by Deshayes, 1828, (*Dictionnaire Classique d'Histoire Naturelle* **14** : 486). It is further requested of the International Commission on Zoological Nomenclature to use its plenary powers to suppress the overlooked, but earlier, generic name *Receptacules* Defrance 1827, as published by Defrance, 1827, (*Dictionnaire des Sciences Naturelles* **45** : 5–7).

2. In 1827 Defrance on pp. 5–7 and in pl. 68, figs. 1a–d described and illustrated a Devonian fossil from Chimay, Belgium, Defrance spelled the name in French *Réceptaculite*, and in supposed Latin *receptacules Neptuni*.

3. The name *Réceptaculite* remained in French literature for a long time. An entry on *receptaculitids* in the *Grand Dictionnaire Universel du XIXe Siècle* (Larousse) published in 1875 (vol. 13, p. 772) uses the term as originally spelled by Defrance.

4. The Latin spelling was, however, changed by Deshayes in 1828, p. 486, to *Receptaculites*, the plural of the French word *Réceptaculite*. Such an alteration of the name was common practice in French systematics of the period, and was not considered emendation. Deshayes attributed the genus to Defrance. The French title of his encyclopedia is *Réceptaculite*, the Latin subtitle *Receptaculites*.

5. With few exceptions subsequent authors have used the name *Receptaculites* Defrance 1827.

6. The *Nomenclator Animalium generum et subgenerum*, part 21, issued 1935, and *Nomenclator Zoologicus*, 1940, attribute the name *Receptaculites* to Blainville, 1830. It appears that the authors of the Nomenclators did not consult the 1828 edition of the French *Dictionnaire d'Histoire Naturelle* where Deshayes' reference was published.

7. Laubenfels in 1955, (*Treatise on Invertebrate Paleontology*, Part E, Archaeocyatha and Porifera : E 108, E 109) states that the name " is based on retention of *Receptaculites* Blainville, 1830, established by nearly universal usage, instead of its senior synonym *Receptacules* Defrance, 1827 ". He also states that he has submitted a case for decision to the International Commission on Zoological Nomenclature.

8. The search of Commissions publications, and subsequent direct appeal to the Commission failed to trace any application for a decision on the spelling of this name.

9. The bibliographic list compiled by me includes forty-seven entries on the generic level that spell the name *Receptaculites*. Thirty-six species have

been referred to the genus as spelled *Receptaculites*. No American references employ the spelling *Receptacules*.

10. On the basis of the above mentioned wide usage of the generic name *Receptaculites*, in the interest of nomenclatural stability, and in order to retain the name *Receptaculites* in the present usage, the Commission on Zoological Nomenclature is asked to take the following action:

(1) use its plenary powers to suppress the generic name *Receptacules* Defrance, 1827, for the purposes of the Law of Priority but not for those of the Law of Homonymy;

(2) place the generic name *Receptaculites* Deshayes, 1828 (gender : masculine), type-species, by subsequent monotypy (Blainville, 1830), *Receptacules neptuni* Defrance, 1827; on the Official List of Generic Names in Zoology;

(3) place the specific name *neptuni* Defrance, 1827, as published in the binomen *Receptacules neptuni* (type-species of *Receptaculites* Deshayes, 1828) on the Official List of Specific Names in Zoology.

CRYPHALUS ERICHSON, 1836 (INSECTA, COLEOPTERA): PROPOSED DESIGNATION OF A TYPE-SPECIES UNDER THE PLENARY POWERS. Z.N.(S.) 1788

By Stephen L. Wood (*Department of Zoology and Entomology, Brigham Young University, Provo, Utah*)

HISTORY OF THE CASE

The generic name *Cryphalus* was proposed by Erichson (1836, *Arch. Naturg.* **2** : 61) to include *Apate tiliae* Panzer, *A. fagi* Fabricius, and *Bostrichus asperatus* Gyllenhal as defined by references to Fabricius (1801, *Systema Eleutheratorium* **2** : 383) species 27 and 26 respectively for the first two species, and to Gyllenhal (1813, *Insecta Svecia descripta.* Classis I. *Coleoptera Siue Eleuterata* **1,** pt. 3 : 368) for the third species. Later, Thomson (1859, *Skandinaviens Coleoptera synoptiskt bearbetade* **1** : 46), designated *B. asperatus* as the type-species of the genus *Cryphalus* and transferred *A. tiliae* to his new genus *Ernoporus.* Thomson (1865, *op. cit.* 7 : 360) later also transferred *A. fagi* to *Ernoporus,* thereby leaving *B. asperatus* as the only original species in the genus *Cryphalus.*

2. Following the description of *Cryphalus,* which by definition had a 4-segmented antennal funicle, a number of species were added to the genus. Of significance here are those of Ratzeburg (1839, *Die Forst-Insecten* **1** : 198–199). Ratzeburg named *Bostrichus* (*Cryphalus*) *abietis* with the comment that until then this species had been known by workers of his day as *B. asperatus* Gyllenhal, presumably including Erichson. He then redefined the true *B. asperatus* Gyllenhal.

In 1868, Fairmaire (*Genera des coléoptères d'Europe* **4** : 105) divided *Cryphalus* by describing the monotypic genus *Trypophloeus* for *Bostrichus* (*Cryphalus*) *binodulus* Ratzeburg (1839, *loc. cit.*) on the basis of a 5-segmented antennal funicle. Somewhat later *B. binodulus* was made a junior subjective synonym of *B. asperatus* by Eichhoff (1878, *Mem. soc. roy. sci. Liége* (2) **8** : 139). *Trypophloeus,* therefore, should be a junior subjective synonym of *Cryphalus.* Bedel (1888, *Ann. soc. ent. France,* hors ser., **6** : 398) recognized the generic synonymy and named the subgenus *Taenioglyptes* for the allies of *B. abietis* that have a 4-segmented antennal funicle. Hopkins (1914, *Proc. U.S. nat. Mus.* **48** : 130) designated *Bostrichus piceae* Ratzeburg (1839, *loc. cit.*) as the type-species of *Taenioglyptes.* Although it has no particular bearing on this case, Eichhoff (1878, *op. cit.*, : 44) described the genus *Glyptoderus* for which Hopkins (1914, *op. cit.*, : 122) designated *B. binodulus* Ratzeburg as the type-species. Thus, *Trypophloeus* Fairmaire, 1878, and *Glyptoderus* Eichhoff, 1878, are objective synonyms of one another.

PRESENT POSITION

3. More than 200 nominal species have been assigned to the genus *Cryphalus* and about 20 to *Trypophloeus.* Bedel's name *Taenioglyptes* was completely overlooked until Wood (1954, *Univ. Kansas Sci. Bull.* **36** : 988) discussed the synonymy and applied the names correctly under the rules of

nomenclature. However, because of the large size, worldwide distribution, and somewhat greater economic importance of *Cryphalus* = *Taenioglyptes*, the major taxonomic specialists on Scolytidae are unanimously reluctant to use Bedel's name. *Trypophloeus* = *Cryphalus* is a comparatively small genus, holarctic in distribution, and has rather insignificant economic importance.

4. Since the genus *Cryphalus* Erichson (1836, *loc. cit.*) was described as having the antennal funicle 4-segmented, and because Ratzeburg (1839, *loc. cit.*) recognized and corrected Erichson's misidentification of *B. asperatus* Gyllenhal, type-species of *Cryphalus*, this case is here submitted to the Commission as recommended in Article 70 of the Code.

The International Commission on Zoological Nomenclature is asked:

(1) to exercise its plenary powers to suppress all designations of type-species for the nominal genus *Cryphalus* Erichson, 1836, made prior to the present designation and to designate *Bostrichus* (*Cryphalus*) *abietis* Ratzeburg, 1839, to be the type-species of that genus;

(2) to place the following generic names on the List of Generic Names in Zoology:

(a) *Cryphalus* Erichson, 1836 (gender: masculine), type-species, by designation under the plenary powers in (1) above, *Bostrichus* (*Cryphalus*) *abietis* Ratzeburg, 1839;

(b) *Trypophloeus* Fairmaire, 1868 (gender: masculine), type-species, by monotypy *Bostrichus* (*Cryphalus*) *binodulus* Ratzeburg, 1836;

(3) to place the following specific names on the Official List of Specific Names in Zoology:

(a) *abietis* Ratzeburg, 1839, as published in the binomen *Bostrichus* (*Cryphalus*) *abietis* (type-species of *Cryphalus* Erichson, 1836);

(b) *binodulus* Ratzeburg, 1839, as published in the binomen *Bostrichus* (*Cryphalus*) *binodulus* (type-species of *Trypophloeus* Fairmaire, 1868);

(4) to place the generic name *Glyptoderus* Eichhoff, 1878, a junior objective synonym of *Trypophloeus* Fairmaire, 1868, on the Official Index of Rejected and Invalid generic names in Zoology.

Although the names of higher categories are involved in this case, such as Cryphaloidea Lindemann, 1875, Cryphalidae Eichhoff, 1878, Cryphali Blandford, 1904, and Cryphalinae Hagedorn, 1910, all are based on *B. abietis* rather than *B. asperatus*. It should also be mentioned that the genera based on these two species are so closely related to one another that the names of higher categories based on *Cryphalus* would not be affected by the case outlined above.

CROBYLOPHORUS KRØYER, 1852, AND *CROBYLOPHORUS CHIMAERAE* KRØYER, 1852 (CESTODA OR MONOGENEA, GYROCOTYLIDA): PROPOSED SUPPRESSION UNDER THE PLENARY POWERS. Z.N.(S.) 1790

By J. van der Land (*Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands*)

The purpose of this application is to request the suppression of both the generic name *Crobylophorus* Krøyer, 1852, and the specific name *chimaerae* Krøyer, 1852 (published in the combination *Crobylophorus chimaerae*).

2. Diesing (1850, *Systema Helminthum* **1** : 408) described *Gyrocotyle rugosa* as a new genus and a new species, on the basis of one specimen from South Africa. He stated that he had an identical specimen from Valparaiso. The type specimen was apparently lost, but the specimen from Chile is still present in the Vienna museum.

3. Krøyer (1852, *Danmarks fiske* **3**(2) : 813) described *Crobylophorus chimaerae*, as a new genus and a new species, on the basis of one specimen from Bergen. The type specimen may be present in the Copenhagen museum, but it cannot be selected from the several old specimens that are present, because of incomplete labelling. Two specimens in one tube have a label bearing Krøyer's name, but date and locality are lacking. Moreover one of these specimens belongs to another (undescribed) species. Krøyer's description clearly does not refer to the undescribed species.

4. Wagener (1852, *Arch. Anat. Phys. Wiss. Medicin* : 543–554, fig. 1–7) described *Amphiptyches urna*, as a new genus and a new species, on the basis of about 20 specimens from the Mediterranean (Nice). Three type specimens are still present in the Berlin museum. The lectotype, serially sectioned, is still in a good condition, but the two lectoparatypes, prepared as balsam whole-mounts, are badly distorted.

5. Krøyer (1853 : 1226–1227) stated: "Den af mig under Navnet *Crobylophorus Chimaera* karakteriserede Form blev, saavidt Slægten angaar, ganske kort efter Offentliggjørelsen af de "danske Fiskes" syvende Hæfte udførligt beskrevet og afbildet af R. G. Wegener efter et rigeligt i Middelhavet samlet Materiale. Jeg siger, saavidt Slægten angaar, thi, ligesom jeg betvivler Artsidentiteten af Middelhavets *Chimaera* med den, nordiske, saaledes mener jeg ogsaa at have Grund til at formode, at deres Parasiter ere forskjællige, skjøndt nærstaaende. *Amphiptyches urna* er det Navn, hvormed Wegener betegner den af ham beskrevne Form".

We may conclude from this that *Crobylophorus chimaerae* should have priority over *Amphiptyches urna* since the latter was published (very shortly) after the former. Krøyer supposed the two species to be different, but since then no investigator has ever claimed the northern and the mediterranean material to belong to different species.

6. Wagener in Diesing (1858) transferred his species *Amphiptyches urna* to the genus *Gyrocotyle* Diesing, 1850, simultaneously changing the specific name: *Gyrocotyle amphiptyches*.

7. Diesing (1859) synonymized *Crobylophorus chimaerae* with *Gyrocotyle amphiptyches* and since then the former name has been mentioned in the literature as a junior synonym only.

8. In spite of the fact that Wagener himself considered *Amphiptyches* to be a synonym of *Gyrocotyle*, at first most authors did not agree to this. At least 15 to 20 references can be given to papers published in the 19th century in which *Amphiptyches* was used as a separate genus. In the 20th century *Amphiptyches* was generally considered a synonym of *Gyrocotyle*. Recently Joyeux & Baer (1951, 1961) defined *Gyrocotyle* and *Amphiptyches* again as different genera. The present author is more inclined to consider *Amphiptyches* a subgenus only, but, anyhow, the name has come into use again.

9. The specific name *urna* has quite frequently been used in the binomina *Gyrocotyle urna* and *Amphiptyches urna* for the most common European representative. A list of references would include titles of more than 50 books and papers; because of the great scientific interest of the group, hundreds of pages have been dedicated to it. Besides those mentioned in paras. 3 and 6 above, no other names are available for this species.

The name *urna* has also occasionally been used for five or six other species of the genus *Gyrocotyle* s. lat., and for *Gyrocotyloides nybelini* Fuhrmann, 1931, i.e., for all known species of the Gyrocotylida, but the reason for this was nearly always that these species were not recognized as being different from *G. urna*. There is only one exception: Lynch (1945) used the name *Gyrocotyle urna* for some species, but not for the common European form, which he included in the species *Gyrocotyle fimbriata* Watson, 1911. He was only followed by Poljanski (1955). This single case of inconsistency in the use of the name *urna* was caused by a misinterpretation of the original description and by the fact that Lynch could only study material from the Pacific Ocean.

Difference of opinion about the identity of *Gyrocotyle urna* is in fact out of the question because of the adequate original description and the existence of type material.

10. The International Commission on Zoological Nomenclature is asked, in the interests of stability of nomenclature:

(1) to use its plenary powers to suppress the following names, for the purposes of the Law of Priority, but not for those of the Law of Homonymy:
  (a) the generic name *Crobylophorus* Krøyer, 1852;
  (b) the specific name *chimaerae* Krøyer, 1852, as published in the binomen *Crobylophorus chimaerae*;

(2) to place the following generic names on the Official List of Generic Names in Zoology:
  (a) *Gyrocotyle* Diesing, 1850 (gender: feminine), type-species by monotypy, *Gyrocotyle rugosa* Diesing, 1850;
  (b) *Amphiptyches* Wagener, 1852 (gender: feminine), type-species by monotypy, *Amphiptyches urna* Wagener, 1852;

(3) to place the following specific names on the Official List of Specific Names in Zoology:

(a) *rugosa* Diesing, 1850, as published in the binomen *Gyrocotyle rugosa* (type-species of *Gyrocotyle* Diesing, 1850);

(b) *urna* Wagener, 1852, as published in the binomen *Amphiptyches urna* (type-species of *Amphiptyches* Wagener, 1852);

(4) to place the generic name *Crobylophorus* Kroyer, 1852, as suppressed under the plenary powers in (1) above, on the Official Index of Rejected and Invalid Generic Names in Zoology;

(5) to place the specific name *chimaerae* Kroyer, 1852, as published in the binomen *Crobylophorus chimaerae*, as suppressed under the plenary powers in (1) above, on the Official Index of Rejected and Invalid Specific Names in Zoology.

THE IDENTITY OF THE SPECIES COMMONLY KNOWN AS *HOLOTHURIA MONACARIA* LESSON, 1830. Z.N.(S.) 1793

By A. M. Clark and F. W. E. Rowe (*British Museum* (*Natural History*) *London*)

Following from an earlier proposal (Clark & Rowe, Z.N.(S.) 1782) dealing with the nomenclature of some holothurians of Jaeger (1833) and Brandt (1835), the problem of the nomenclature of the species commonly known as *Holothuria monacaria* Lesson, 1830, remains outstanding, for which three proposals have been put forward in recent years.

2. Cherbonnier (1951) after studying the remaining type-material of Lesson in the Paris Museum, agreed with Deichmann (1938) that *H. monacaria* in its present sense, i.e. sensu Théel, 1886, is not conspecific with the species represented by Lesson (1830 : 225, pl. 78). Although he could find no holotype of *H. monacaria*, Cherbonnier did discover that four out of the five surviving specimens collected by Lesson at Borabora (the joint type-locality with Tahiti, both being in the Society Islands) agreed with Lesson's description and figure of *monacaria*. However, these specimens are in fact referable to *Actinopyga mauritiana* (Quoy and Gaimard), 1833 and not to *H. monacaria* sensu Théel. Cherbonnier concluded that there is a strong probability that *H. monacaria* Lesson is conspecific with *A. mauritiana* (Quoy and Gaimard). Later in the same revision (1952) he redescribed the extant holotype of *Holothuria hilla* Lesson, 1830 (p. 226, pl. 79), showing that the species described and figured as *monacaria* by Théel following Semper (1868) should rather have been named *hilla*, which name Théel only referred to his list of insufficiently-known species. Accordingly Cherbonnier revived the name *H. hilla*.

3. As he noted, Deichmann (1938) had already pointed out the current misusage of the name *monacaria*. However, she had not been able to decide on the true identity of Lesson's species and concluded that " possibly it is a well-known form and the name *monacaria* may be placed among the synonyms". As she was apparently unaware that Lesson's type-material might still exist but did have access to Selenka's type-specimen of *Stichopus gyrifer* (1867), which she considered to be conspecific with *monacaria* in Théel's sense, Deichmann proposed to adopt the name *gyrifer* in preference to *monacaria* on the grounds of the uncertain identity of the latter. However, Cherbonnier (1951) was not convinced that *gyrifer* is necessarily conspecific with *hilla*.

4. Panning (1951) discovering the existence of the type-material of *Holothuria umbrina* Rüppell and Leuckardt, 1828, in the Senckenberg Museum, gave a detailed description with figures of some spicules. He concluded that *H. umbrina* and *H. monacaria* (at least in Théel's sense, which he assumed was also Lesson's) are conspecific and that although the name *umbrina* antedates *monacaria*, the more familiar latter name should be retained. Panning does not appear to have seen Deichmann's paper of 1938 or Cherbonnier's work concurrent with his own. Since Théel's Challenger report (1886) *H. umbrina* has been left aside as an insufficiently-known species.

5. After a comparison of the spicules figured by Panning for *umbrina* with material in the British Museum collections, notably a Semper slide of *Holothuria difficilis* Semper possibly from type-material, together with the description of *umbrina*, particularly with regard to its numerous ventral pedicels, we are convinced that Panning was mistaken in this. The spicules that he illustrates and the extensive distribution of the ventral pedicels beyond the radii, the restriction of which is so characteristic of *H. monacaria* sensu Théel, suggest strongly that *umbrina* is conspecific with *H. difficilis* instead. Dr. Panning now thinks that he may have been mistaken; his work at the time was complicated by post-war difficulties of access to material for comparison.

6. After raising this problem with Dr. Deichmann, we received the following support for our opinion from her. " Panning refers Rüppell's species from the Red Sea to *Holothuria monacaria* Lesson, 1830. This is of course possible but Rüppell's figure indicates something similar to *difficilis* Semper, while his material, examined by Panning (two types 3.3 and 4.4 cm. long, completely bleached, and a third specimen 13.5 cm. long from Naples) suggests *sanctori* Delle Chiaje, a species which he had not personally examined, in 1934. The spicules of all three specimens are quite similar; he unfortunately does not indicate whether the figures are all from one individual or from all three of them and there are not very great differences between those found in *difficilis* and *sanctori*. The conclusions one may draw are that the Naples specimen is a true *sanctori* and the bleached types represent *difficilis*."

7. The oldest available name for the species which is the subject of this paper therefore appears to be *Holothuria hilla* Lesson, 1830.

We therefore consider that:

(a) *Holothuria umbrina* Rüppell and Leuckardt, 1828 should be suppressed since it threatens *H. difficilis* Semper, 1868;

(b) *H. monacaria* Lesson, 1830 should be suppressed since it threatens *Actinopyga mauritiana* (Quoy and Gaimard), 1833;

(c) *H. monacaria* Théel, 1886, is not conspecific with *monacaria* Lesson, 1830, but with *H. hilla* Lesson by which it should be replaced as the oldest available name.

(d) *H. gyrifer* (Selenka), 1867, is closely related to, if not conspecific with, *H. hilla*.

8. For the last hundred years the name *Holothuria monacaria* has been in general use by taxonomists of holothurians, including most notably Semper, Lampert, Théel, Sluiter, Fisher, Koehler and Vaney, H. L. Clark, Panning and Heding, as well as Cherbonnier himself in papers earlier than his revision of Lesson's types. Regrettable though it may be to abandon this well-known name for a common Indo-Pacific holothurian, since the three leading specialists of recent years have put forward independent and differing solutions for the naming of the species, it unfortunately seems best to follow the rule of priority to some extent and to adopt the name *Holothuria hilla* Lesson.

9. Accordingly, we request the International Commission on Zoological Nomenclature:

(1) to use its plenary powers to suppress for the Law of Priority but not for the Law of Homonymy the following specific names:

(a) *umbrina* Rüppell and Leuckardt, 1828, as published in the binomen *Holothuria umbrina;*

(b) *monacaria* Lesson, 1830, as published in the binomen *Holothuria monacaria;*

(2) to place the specific names suppressed under the plenary powers in (1) above on the Official Index of Rejected and Invalid Names in Zoology;

(3) to place the following specific names on the Official List of Specific Names in Zoology:

(a) *hilla* Lesson, 1830, as published in the binomen *Holothuria hilla*;

(b) *mauritiana* Quoy and Gaimard, 1833, as published in the binomen *Holothuria mauritiana*;

(c) *difficilis* Semper, 1868, as published in the binomen *Holothuria difficilis*.

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THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

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BULLETIN OF ZOOLOGICAL NOMENCLATURE

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NOTICES

(a) *Date of Commencement of Voting.*—In normal circumstances the Commission starts to vote on applications published in the *Bulletin of Zoological Nomenclature* six months after the publication of each application. Any zoologist who wishes to comment on any of the applications in the present part is invited to send his contribution, in duplicate, to the Secretariat of the Commission as quickly as possible, and in any case in time to reach the Secretariat before the close of the six-month period.

(b) *Possible use of the Plenary Powers.*—The possible use by the Commission of its plenary powers is involved in the following applications published in the present part of the *Bulletin:*

(1) Suppression of *Gryllus succinctus* Linnaeus, 1758; *Acridium assectator* Fischer von Waldheim, 1833; *Cyrtacantharis fusilinea* Walker, 1870; *Cyrtacantharis inficita* Walker, 1870; *Acridium rubescens* Walker, 1870; *Acridium elongatum* Walker, 1870 (Insecta, Orthoptera). Z.N.(S.) 1761.

(2) Designation of a type-species for *Elatophilus* Reuter, 1884 (Insecta, Hemiptera). Z.N.(S.) 1732.

(3) Suppression of *Leptoglena* Grassé & de Boissezon, 1929, *Protobalantidium* Abé, 1927, *Ptyxidium* Perty, 1852, *Turchiniella* Grassé & Boissezon, 1929, *Enchelis ovulum* Müller, 1773, *Trichoda patula* Müller, 1786, *Kolpoda pirum* Müller, 1786, *Trichoda pyrum* Ehrenberg, 1830, LEUCOPHRYIDAE Mugard, 1949; priority to *Tetrahymena* Fergason, 1940 over *Lambornella* Keilin, 1921, *Leucophrydium* Roux, 1899 and *Paraglaucoma* Kahl, 1926; validation of emendation to *Enchelys* of *Enchelis* Müller, 1773; validation of emendation to *Colpoda* of *Kolpoda* Müller, 1773; validation of emendation to *colpoda* of *kolpoda* (*Paramaecium*) Losana, 1829; validation of *Leucophrys patula* Ehrenberg, 1830; validation of *Leucophrys pyriformis* Ehrenberg, 1830 (Ciliophora). Z.N.(S.) 625.

(4) Validation of two species named *Papilio aglaja* Linnaeus, 1758 (Insecta, Lepidoptera). Z.N.(S.) 1791.

(5) Validation of *Galeopithecus* Pallas, 1783 (Mammalia). Z.N.(S.) 1792.

c/o British Museum (Natural History),
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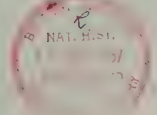
London, S.W.7, England.
May 1967

W. E. CHINA
Assistant Secretary,
International Commission
Zoological Nomenclature



COMMENTS ON APPLICATION BY V. M. DIRSH REGARDING THE TYPE SPECIES OF *PATANGA* UVAROV. Z.N.(S.) 1761

(see volume 23, pages 235–238)

By K. H. L. Key

I wish to draw attention to certain unsatisfactory features of the above application and to propose alternative action.

1. Dirsh's para. 2.—Article 75 of the Code authorizes the designation of a neotype only " if, through loss or destruction no holotype, lectotype, or syntype exists ". In the case of *Gryllus succinctus* L. there is no evidence or presumption of loss or destruction; on the contrary, Dirsh states that " it is almost certain " that a specimen now in the Linnean Collection in London " is actually the type of the species ". The Code unfortunately admits of a wide region of uncertainty between the situation where a holotype or a syntype series can be quite certainly recognized as such and the situation where loss or destruction is certainly known to have occurred. The numerous nominal species falling within this region of uncertainty cannot, under a strict interpretation of the Code, be provided with a valid type of any kind. A partial solution is to relax the rigidity of the proof required before accepting specimens as holotypes or syntypes. I would suggest that if it is almost certain that a specimen is the holotype of a species then it should be accepted as the holotype without more ado. It is in any case clear that the specimen from the Linnean Collection cannot be designated as a neotype under Article 75. The Commission could designate it as neotype under the plenary powers (i.e. under suspension of Article 75), but if a neotype is to be designated at all, it should be a well preserved specimen of the more diagnostic male sex, and not the damaged Linnean female.

2. Dirsh's para. 5.—In the case of *Acridium assectator* Fisch. v. Wald., the contrary situation exists. Here, according to Dirsh, the type specimen is " lost ". A neotype can therefore be designated without use of the plenary powers, which Dirsh apparently considers necessary.

3. Dirsh's para. 10.—It is not correct to say that, in the light of the considerations advanced by Dirsh, the species hitherto known as *Valanga nigricornis* (Burm.) " must " be called *Valanga succincta* (L.) and the species known as *Patanga succincta* (L.) " must " be called *Patanga assectator* (Fisch. v. Wald.). Article 70(a) provides that in the case of a misidentified type species the Commission is to " designate as the type species . . . whichever species will in its judgment best serve stability and uniformity of nomenclature . . ." (the possibilities including any species at all). The possible outcomes are thus quite diverse. For example, if the Commission were to designate *succincta* = *nigricornis* as the type species, *Patanga* and *Valanga* would become subjective synonyms and, depending upon the decision of the " first reviser ", the species concerned would be known as *Patanga succincta* or *Valanga succincta*. In the first case the taxonomic content of the genus *Patanga* would be altered; in the second, the name *succincta* would be transferred from *Patanga* to *Valanga*. Only if the Commission were to designate *assectator* as the type species would the consequences as stated by Dirsh eventuate.

4. Dirsh does not mention the fact that both of the taxonomic species in question are of economic importance, and that since 1923 the name *Patanga succincta*, in particular, has been universally employed in the moderately extensive applied and general entomological literature on the first species, the name *Valanga nigricornis* similarly in the less extensive literature on the second. In order, therefore, to " serve stability and uniformity of nomenclature ", it is clearly desirable for the Commission to reach a decision that will disturb as little as possible the names customarily used for the two species. Dirsh's proposal would not only substitute *assectator* for the accustomed *succincta* in *Patanga*; it would transfer *succincta* to *Valanga* as the valid name for the economic species hitherto known as *Valanga nigricornis*. This kind of transfer is particularly productive of confusion and the Commission has consistently striven to avoid it.

5. It seems that the essential action for the Commission to take, under its plenary powers, is to suppress *succincta* L. and all subsequent uses of the name. This (on the basis of Dirsh's information, which I have not attempted to check) would (a) remove any threat to the continued use of *Valanga nigricornis* in its accustomed sense; (b) avoid complications of generic synonymy; (c) avoid transfer of the name *succincta* from one taxonomic species to another; and (d) dispel concern with the type specimen of *succincta*. It would, however, leave as unavoidable the simple change from *succincta* to *assectator* as the name of the economic species of *Patanga*. Any attempt to preserve *succincta* for that species would be procedurally much more questionable. It would presumably involve invalidation of Linnaeus' type specimen and the designation under the plenary powers of a neotype inconsistent with the original description; for Dirsh cites no published use of *succincta* between 1763 and the date of publication of *assectator*, such as could be used to establish an author and date for the former name if *succincta* L., 1763 (only) were to be suppressed.

6. In view of the above arguments, I request the Commission to consider the following action, as alternative to that proposed by Dirsh and securing more effectively a clarification of the nomenclatural problems with which he is concerned:

(1) to use its plenary powers:

(a) to suppress the name *succinctus* Linnaeus, 1763, as published in the binomen *Gryllus succinctus*, for the purposes of the Law of Priority, but not for those of the Law of Homonymy;

(b) to set aside all designations of type-species for the nominal genus *Patanga* Uvarov, 1923, made prior to the Ruling now requested and to designate *Acridium assectator* Fischer von Waldheim, 1833, to be the type of that genus;

(2) [As Dirsh's (2)];

(3) to place the following specific names on the Official List of Specific Names in Zoology:

(a) *assectator* Fischer von Waldheim, 1833, as published in the binomen *Acridium assectator* (type-species of *Patanga* Uvarov, 1923);

(b) *nigricorne* Burmeister, 1838, as published in the binomen *Acridium nigricorne* (type-species of *Valanga* Uvarov, 1923).

By D. Keith McE. Kevan (*Dept. of Entomology, McGill University, Macdonald College, P.Que., Canada*)

Although I normally favour as strict adherence as possible to the Law of Priority in nomenclature, with a minimum recourse to the use of the Plenary Powers of the Commission, I believe such recourse to be warranted in respect of the recent application of V. M. Dirsh. As this application affects two economically important species from the same region, it would, if approved, undoubtedly lead to confusion and lack of stability. This is particularly true since the species in question are important in regions where literature is less readily accessible and the nicer points of nomenclatorial procedure are less generally appreciated. The literature, particularly on the species currently called *Patanga succincta*, is reasonably extensive. It will certainly increase in volume, and the name used will for some time undoubtedly remain unchanged.

Although I incline toward the suggestion of Commissioner Key for the complete suppression of *succincta* for the reasons given by him, I believe practical considerations outweigh technicalities and I consider that the name *Patanga succincta* should, if possible, be conserved for the species to which it is currently applied. If it is necessary to use *P. assectator* in its place on technical grounds, I would strongly advocate that the name *succinctus* be not transferred to the species currently called *Valanga nigricornis*, as such action would prove particularly confusing.

I would suggest that the simplest solution to the problem would be to designate the proposed neotype of *Acridium assectator* Fischer von Waldheim, 1833, to be also the

neotype of *Gryllus succinctus* Johansson *in* Linnaeus, 1763,[1] even although the specimen does not tally fully with the original description of *succinctus*.

There is, however, one major difficulty—Dirsh (*l.c.*) has established the existence of a type for *Gryllus succinctus* from the Linnaean collection. Although there is always some element of uncertainty regarding the matter of Linnaeus' types, there seems to be very little doubt in this instance that the specimen figured by Dirsh is the holotype, or at least a syntype (lectotype). To designate it as a " neotype " seems to me to be undoubtedly incorrect. If the specimen is not indeed a primary type, I recommend that it be not recognized as a neotype. If it be a primary type, I recommend that it be set aside in the interests of stability of nomenclature, even although this course of action would be procedurally open to criticism.

I do not believe that a taxonomist would be greatly disturbed by the nomenclatorial change that strictly should result from Dirsh's revelation, but the majority of those concerned with the species in question are not taxonomists. Stability and uniformity of nomenclature are particularly desirable in such cases as the present.

By Boris Uvarov, F.R.S. (*Anti-Locust Research Centre, London*)

The genus *Patanga* was erected by Uvarov in 1923 with the type-species cited as *Gryllus Locusta succinctus* Linnaeus, 1763, described from Java.

2. No type-specimen of the Linnean species was known at the time and the specific concept was based on the common usage of the name at the time (para. 8 below).

3. A female specimen in the collection of the Linnean Society of London, according to Dirsh, " agrees fairly well " with the original description and bears a label *succinctus* " probably " in Linnean handwriting. Dirsh (para. 2 of his proposals) was " almost " certain that the specimen was the type, but did not regard it as such, and proposed to designate it as neotype " for the sake of formality ". If a single specimen exists in the Linnean collection, it should be regarded as the holotype and there is no need to designate a neotype. However, both the neotype designation or the acceptance of the Linnean specimen as the holotype would create a great disturbance of nomenclature and lead to a confusion as shown below.

4. The first source of confusion is that the conception of the taxon *succinctus* Linnaeus by Dirsh is based on the female from Java and he regards the name as a senior synonym of *Acridium nigricorne* Burmeister, 1838. The type of the latter, also a female, is lost and Dirsh designated, as male neotype, " the specimen designated as neotype of *Gryllus succinctus* Linnaeus, 1763 in 2 above (Plate 1, figs. 1–7) "; that specimen, however, is a *female* and cannot be designated *male* neotype; amongst the illustrations quoted, figs. 4, 5, 6 and 7 which represent genitalia of another specimen of male sex, without any data as to its locality, location etc. are irrelevant. This designation is so confused that it cannot be regarded as valid.

Moreover, the proposed designation is definitely inadmissible also because *Acridium nigricorne* Burmeister was described from Singapore and *G. succinctus* Linnaeus from Java. Both these species, according to Dirsh, should be in the genus *Valanga* Uvarov, which comprises according to the latest revision (Willemse, 1957, *Public nat. Genoot. Limburg* **10** : 260–295) at least 29 taxa of specific and subspecific rank, distributed over southern Asia, Indonesia, Philippines, Pacific islands, and northern Australia; amongst them, the only one known from Malaysia and not

[1] A ruling by the International Commission is needed in respect of the authorship of names proposed in Linnaeus' " Centuria Insectorum " (*Amoen. Acad.* 6). The assertion of Professor Brinck, cited by Dirsh (*l.c.*), that Johansson was a student who publicly discussed Linnaeus' paper is undoubtedly true, but if a name was published in association with that of Johansson, does this not make him, technically at least, the author of the name of the species? A student of mine who publishes under his own name a description of a species that I may have first recognized is the author of that species—even if the actual wording used is mine—unless it is specifically stated that I am the author of the description. There is not even anything unethical about this if due acknowledgment for assistance is made. Is there a distinction between such a case and that of Johansson?

from elsewhere is *nigricorne* Burmeister, while that occurring in Java, but not on the mainland, is *Acridium melanocorne* Serville, 1839; the differences between the mainland *nigricorne* and the Javanese *melanocorne* are generally recognized (Uvarov, 1923, *Ann. Mag. nat. Hist.* (9) **72** : 347, 348, 354; Willemse, *t.c.*, : 265, 271); although they are regarded as subspecies, not species, this does not affect their status of independent taxa, according to Article 45(a) of the *Code*. Therefore, it is *melanocorne* Serville and not *nigricorne* Burmeister which might be regarded as a junior synonym of *succinctus* Linnaeus if the neotype designation of the latter by Dirsh is admitted; as it stands, his concept of *succinctus* is based on two distinct taxa.

The designation by Dirsh of a Javanese insect as neotype of the mainland *nigricorne* shows a disregard of the qualifying condition in Article 75 (c) (5) of the *Code* and is clearly invalid.

To prevent further confusion, a neotype of *Acridium nigricorne* Burmeister 1838 is designated herein, being a male in the British Museum (Natural History), labelled as follows:—" Singapore. H. N. Ridley 1905–203 " and with a green label " 194 ".

5. Particularly grave confusion would arise from the apparent synonymy of neotypes of *succinctus* Linnaeus and *nigricorne* Burmeister proposed by Dirsh because this would make *succinctus* Linnaeus the type-species of the genus *Valanga* Uvarov, 1923, the type-species of which was cited as *Acridium nigricorne* Burmeister by Uvarov in 1923 (*Ann. Mag. nat. Hist.* (9) **11** : 143) and not by Bei-Bienko and Mistshenko in 1951, as erroneously stated by Dirsh (*t.c.* : 236). The name *Gryllus succinctus* Linnaeus was cited by Uvarov (*t.c.* : 143) as the type-species of the genus *Patanga* Uvarov, 1923, so that the genera *Patanga* and *Valanga* would appear to be based on the same type-species, and, therefore, synonymous whereas they are recognized by all taxonomists, including Dirsh, as distinct taxa of the genus-group status. This logical, but nevertheless absurd, conclusion suggests that either the specimen of *succinctus* cited by Dirsh is not the Linnean type; or that this name cited as type-species of *Patanga* by Uvarov was a misidentification. In fact my (Uvarov) use of the name *succinctus* was based on the long-established usage (para. 8 below); this was not stated at the time, but is clear from the descriptions of the genus and the species, and is emphatically confirmed now.

Therefore, the most reasonable way to resolve the problem would be to regard the designation of the type-species of *Patanga* by Uvarov as a misidentification. The Commission is requested in accordance with Articles 67 (j) and 70 (a) (ii), (iii) and (b) (i), to designate *succincta* Uvarov, 1923, *nec* Linnaeus 1763, as the type-species of *Patanga* Uvarov, 1923. As male lectotype of this species is herein designated the specimen in the British Museum (Natural History) with the following labels: " Fed. Malay States. Sitiawan. x. 1921. G. H. Corbett. Destructive to Padi. Pres. by Imp. Bur. Ent. Brit. Mus. (Nat. Hist.) " and " *Patanga succincta* Uvarov, 1923. Lectotype designated by B. Uvarov. 30.I.1967 ".

6. The solution offered in the preceding paragraph would make redundant the request by Dirsh (*t.c.* : 237) for the Commission to designate *Acridium assectator* Fischer von Waldheim, 1833 to be the type-species of the genus *Patanga* Uvarov, 1923, replacing *succincta* Uvarov, 1923 (*nec* Linnaeus, 1763).

Acridium assectator Fischer von Waldheim, 1833 was described from " steppes des Kirghises ", a locality questioned by the author and obviously incorrect as the species, according to its original description and the more detailed one by the same author, accompanied by excellent illustration (1846) is unquestionably identical with *Patanga succincta* Uvarov (*nec* Linnaeus), which is a tropical insect. The name *Acridium assectator*, however, has not been used for 90 years, between 1833 and 1923 when it was quoted by Uvarov as a junior synonym of *Patanga succincta* Uvarov; it would be, therefore, reasonable in accordance with Article 23 (b) of the *Code* to regard it as a *nomen oblitum*. I understand that cases involving that Article are being treated at present as cases of suppression under the plenary powers. If this is done the neotype of *assectator* designated by Dirsh would become redundant.

7. Before proceeding further, it is essential to stress that the names in question refer to two locusts of great economic importance which is likely to increase with the

agricultural development of the countries where one or both of them occur. Studies on their biology, ecology, relation to crops and control are in progress in a number of local entomological institutions and universities; in the course of such studies, old literature must be consulted and any uncertainty in the nomenclature is bound to cause confusion and lead to errors. The Commission is, therefore, requested to give special consideration to the practical consequences of changes in the names of these locusts that would follow the acceptance of proposals by Dirsh.

8. The name *succinctus* Linnaeus, has been applied, in such combinations as *Acridium succinctum*, *Cyrtacanthacris succincta*, *Orthacanthacris succincta*, to a common swarming locust of southern Asia since, at least 1890 (E. C. Cotes, *J. Bombay nat. Hist. Soc.* **5** : 86–92; *Indian Museum Notes* **2** : 99–115); Y. Ramchandra Rao (*The Desert Locust in India*, 1960 : 623–630) recorded plagues of this locust, commonly known as the Bombay Locust, from 1789 to the present time. Descriptions and illustrations of this locust, observations on its biology and economic importance have been published in India by H. Maxwell-Lefroy (1906, *Mem. Dep. Agric. India, Entom.* **1** : 112 pp., 13 pls.), in Malaya by H. T. Pagden (1959, *Bull. Dep. Agric. Malaya* **106** : 39 pp., 2 maps, 10 pls., 2 figs.), in Indonesia by L. G. E. Kalshoven and J. van der Vecht (1950, *De Plagen van de Cultuurgewassen in Indonesie* **1** : 118) and numerous records of its occurrence and damage to agricultural plants in many countries of southern Asia and Indonesia appeared in taxonomic, faunistic and economic literature, always under the name *succincta* which also will be found applied to the same insect in such widely used monographs as *Fauna of British India* (1914) and *Fauna of the U.S.S.R.* (1952), as well as in textbooks of entomology for, at least, half a century. The combination *Patanga succincta* has been in general use since its publication by Uvarov in 1923, that is for 44 years, and it would obviously cause a great confusion if it were replaced by *Patanga assectator*, a name that has been in oblivion for more than a century and since its publication has been quoted only as a junior synonym.

9. Other generally recognized synonyms of *Patanga succincta* as listed by Uvarov (1923, *t.c.*) and Willemse (1957, *t.c.*) are, as follows:

Cyrtacanthacris fusilinea Walker, 1870, *Cat. Derm. Salt. Brit. Mus.* **3** : 564
Cyrtacanthacris inficita Walker, 1870, *t.c.* : 565
Acridium rubescens Walker, 1870, *t.c.* : 588
Acridium elongatum Walker, 1870, *t.c.*, **4** : 636

The four species-names by Walker have never been used for nearly a century except as junior synonyms and, to prevent confusion, the Commission is requested to suppress them under the plenary powers and to put them on the Official List of Rejected Names.

10. The proposal by Dirsh that the locust *Valanga nigricornis* should be renamed *Valanga succincta*, if accepted, would increase the confusion still more. This locust is also well-known in southern Asia, is an important pest and has extensive taxonomic, faunistic and economic literature; should the name *succincta* be transposed from *Patanga* to *Valanga*, local entomologists would be bewildered and future records hopelessly entangled.

11. In order to achieve the least disturbance of nomenclature and to prevent confusion in the application of species-names of the two well-known and economically important locusts, the International Commission is requested:

(1) to use its plenary powers:
  (a) to suppress the specific name *succinctus* Linnaeus, 1763, as published in the binomen *Gryllus succinctus*, and all other uses of this specific name before that by Uvarov, 1923, for the purposes of both the Law of Priority and the Law of Homonymy;
  (b) to suppress the following specific names for the purposes of the Law of Priority but not for those of the Law of Homonymy:
    (i) *assectator* Fischer von Waldheim, 1833, as published in the binomen *Acridium assectator*;
    (ii) *fusilinea* Walker, 1870, as published in the binomen *Cyrtacanthacris fusilinea*;

(iii) *inficita* Walker, 1870, as published in the binomen *Cyrtacanthacris inficita*;
(iv) *rubescens* Walker, 1870, as published in the binomen *Acridium rubescens*;
(v) *elongatum* Walker, 1870, as published in the binomen *Acridium elongatum*;
(c) to set aside all designations of type-species for the nominal genus *Patanga* Uvarov, 1923 made prior to the Ruling now requested and, having done so, to designate *succincta* Uvarov, 1923 (*nec* Linnaeus, 1763) to be the type of that genus;
(d) to designate the male specimen in the British Museum (Natural History), labelled " Singapore, H. N. Ridley, 1905–230 " and with a green label " 194 " as neotype of *Acridium nigricorne* Burmeister, 1838.

(2) to place the following generic names on the Official List of Generic Names in Zoology:
(a) *Patanga* Uvarov, 1923 (gender: feminine), type-species by designation under plenary powers in (1) (c) above, *Patanga succincta* Uvarov, 1923;
(b) *Valanga* Uvarov, 1923 (gender: feminine), type-species by the original designation by Uvarov, 1923, *Acridium nigricorne* Burmeister, 1838, as interpreted by the neotype designated in (1) (d) above.

(3) to place the following specific names on the Official List of Specific Names in Zoology:
(a) *succincta* Uvarov, 1923, as published in the binomen *Patanga succincta* validated under the plenary powers in (1) (c) above and as interpreted in the original description (type-species of *Patanga* Uvarov, 1923);
(b) *nigricorne* Burmeister, 1838, as interpreted by the neotype designated in (1) (d) above (type-species of *Valanga* Uvarov, 1923).

(4) to place the following names suppressed under the plenary powers in (1) above on the Official List of Rejected and Invalid Specific Names in Zoology:
(a) *Gryllus Locusta succinctus* Linnaeus, 1763;
(b) *Acridium assectator* Fischer von Waldheim, 1833;
(c) *Cyrtacanthacris fusilinea* Walker, 1870;
(d) *Cyrtacanthacris inficita* Walker, 1870;
(e) *Acridium rubescens* Walker, 1870;
(f) *Acridium elongatum* Walker, 1870.

By Y. Ramchandra Rao (*Adoni, Pradesh, India*)

Before retiring from Government service in India in 1941, I had served as the Madras Govt. Entomologist for 8 years, and later from 1930–1941, as Locust Research Entomologist under the Government of India, for ten years. In view of the long experience I have had of entomological work in India, I feel I am entitled to make a few observations in respect of the feelings of entomological workers in India in respect of the present application.

What entomologists in India do feel rather sad about is the replacement of various familiar and often time-honoured names by certain, often strange names. In many cases, possibly, there may be sound reasons for bringing about such suppressions, but it must be conceded that such changes, especially in the case of common and familiar names have an unsettling effect on the minds of the younger workers. Priority of nomenclature is often a just and correct procedure, but it should not be sanctioned freely in every case, especially where very familiar names are concerned.

One of the two locusts concerned in the present application, *Patanga succincta*—popularly known as the " Bombay Locust "—has been well-known to Indian Entomologists since the days of Cotes (1890). I happen to be interested in this locust, as I have been working on the past invasions of this species for many years, and I am in hopes of publishing a monograph on this locust. Since the future name of the insect is now in question, I cannot say how much confusion is ahead before the results of the work can be published.

I confess I am not a systematist and I am therefore not in a position to assess the validity of the changes proposed, but so far as economic entomology is concerned, I do not expect any particular object would be gained thereby.

By Curtis W. Sabrosky (*Entomology Research Division, U.S. Department of Agriculture, Washington, D.C., U.S.A.*)

In a recent issue of the *Bulletin of Zoological Nomenclature*, (**23** : 235–238), Dirsh has discussed the case of misidentified type-species of *Patanga* Uvarov in Orthoptera. In developing this subject, he proposes to designate three neotypes. I submit that all three are unnecessary, and that they are therefore unwarranted under the Code. Accordingly, while approving Dirsh's proposal (1a) with respect to the misidentified type-species, I oppose the neotype designations.

2. The provisions of Article 75 (" Neotypes ") were made stringent intentionally, after long and detailed discussions at two International Congresses of Zoology (Copenhagen, 1953; London, 1958), in order to prevent needless designations of neotypes. Almost reluctantly, provisions for neotypes were written into the Code only for " exceptional circumstances . . . in which a neotype is essential for solving a complex zoological problem ".

The case ably and concisely outlined by Dirsh shows that there is some confusion in usage of names, but the confusion arises from Uvarov's misidentification, not from the lack of type specimens for the species involved. From the descriptions alone of Linnaeus and Uvarov, Dirsh demonstrates that *succinctus* was misidentified (par. 4). He finds that even though the type of *Acridium assectator* is lost, the identity of the species " is clear " from the description plus a " reasonably good figure in colour " (par. 5). Finally, even without the type of *Acridium nigricorne*, Dirsh can state that " it is quite clear what . . . that taxon was and is still considered to be " (par. 7). What, then, is the exceptional confusion that demands neotypes?

4. Given the single decision that *Acridium assectator* Fischer von Waldheim is to be considered the type-species of *Patanga*, because it represents *P. succincta* sensu Uvarov, nec Linnaeus, the other desired effects (par. 10) would follow as simple and direct results, without reference to neotypes.

5. In any event, I question that the specimen extant in the Linnaean Collection in London (par. 2) should be called a neotype. Rather, the evidence suggests that it should be presumed to be the holotype, in the absence of evidence to the contrary.

6. I note two slight errors of reference in par. 10 (3): In (3)(a) and (3)(b), respectively, the plenary powers referred to should be cited as " in (1)(b) above " and " in (1)(c) above ".

By Fer Willemse (*Eygelshoven, Netherlands*)

Most important is the disagreement of the description of *Gryllus succinctus* by Linnaeus, 1763 and that by Uvarov, 1923, as pointed out by Dirsh in para. 4 of his proposals.

2. I agree with Uvarov's opinions as set out in his comments in para. 3, para. 4 (except for its last paragraph " To prevent further . . . green label " 194 ". "), para. 5 (except for its second paragraph " Therefore, the most . . . 30.1.1967 ". "), para. 7 and para. 10.

3. The genera *Patanga* and *Valanga* were erected and revised by Uvarov, 1923 (*Ann. Mag. nat. Hist.* (9)**11** : 143; *ibid.* (9)**12** : 345–359, 362–366). Only parts of these genera were discussed by Sjöstedt, 1935 (*K. svensk. Vet. Akad. Handl.* (3) **15** (2) : 69–70, 155–161) and 1940 (VI *Congr. Intern. Ent.*, Paris, 1935 : 174, 177–179), Rehn & Rehn, 1941 (*Proc. Acad. Nat. Sci. Philad.* **92** (1940) : 257–284) and most recently by C. Willemse, 1957 (*Publ. natuurh. Gen. Limburg* **10** : 260–302). Up to now five species of *Patanga* and one subspecies have been described, of *Valanga* about 34 species and about 26 subspecies (exclusive of the taxa at present accepted to be synonymic). In *Valanga nigricornis* (Burmeister, 1838) are distinguished about 19 subspecies. The

genus *Valanga* especially is badly in need of revision (cf. C. Willemse, 1957, *ibid.* p. 261 and Fer Willemse, 1965, *Ent. Mitt. zool. Mus. Hamburg* **3** : 63). In this revision should be used not only the conventional external characters but also (and then for the first time) internal ones (genitalia).

4. Dirsh designated under para. 2 a neotype of *Gryllus succinctus* Linnaeus, 1763, under para. 5 a neotype of *Acridium assectator* Fischer von Waldheim, 1833 and under para. 9 of his proposals a neotype of *Acridium nigricorne* Burmeister, 1838. Uvarov designated under para. 4 of his comments a neotype of *Acridium nigricorne* Burmeister, 1838.

Apart from the doubtful validity of some of Dirsh's neotypes (see Uvarov's comments), all above recorded neotype designations do not refer to exceptional circumstances in accordance with Article 75(a) (1) of the Code, because *Patanga succincta* (sensu Uvarov, 1923) and *Valanga nigricornis* (Burmeister, 1838) are species clearly recognized by all taxonomists. Besides, the designation of these neotypes is premature, because, as set out in para. 3 above, the necessary exhaustive revisory work has still to be done and as a consequence the neotypes may create further disturbances of nomenclature if the specimens prove to belong to species or subspecies other than the present common usage of the taxa concerned.

5. Uvarov designated further in para. 5 of his comments a lectotype of *Patanga succincta* Uvarov, 1923. He urges also to synonymise four Walker's taxa as set out in para. 9 of his comments. As pointed out in para. 3 and 4 above, it seems wise neither to designate prematurely a neotype of *Patanga succincta* Uvarov, 1923, nor to definitely synonymise prematurely the Walker taxa concerned, because this also may create further disturbances of stability of nomenclature.

6. The International Commission is asked:

(1) to use its plenary powers to set aside the designation of:
   (a) neotype of *Gryllus succinctus* Linnaeus, 1763, as set out in para. 2 and 10(1)(c) of Dirsh's proposals;
   (b) lectotype of *Patanga succincta* Uvarov, 1923, as set out in para. 5 of Uvarov's comments;
   (c) neotype of *Acridium assectator* Fischer von Waldheim, 1833, as set out in para. 5 and 10(1)(b) of Dirsh's proposals;
   (d) neotype of *Acridium nigricorne* Burmeister, 1838, as set out in para. 4 and 11(1)(d) of Uvarov's comments;
   (e) neotype of *Acridium nigricorne* Burmeister, 1838, as set out in para. 9 of Dirsh's proposals;

(2) to set aside Uvarov's proposal in para. 11(4) of his comments, to place on the Official List of Rejected Names in Zoology:
   (a) *Acridium assectator* Fischer von Waldheim, 1833;
   (b) *Cyrtacanthacris fuslinea* Walker, 1870;
   (c) *Cyrtacanthacris inficita* Walker, 1870;
   (d) *Acridium rubescens* Walker, 1870;
   (e) *Acridium elongatum* Walker, 1870.

COMMENT ON THE PROPOSED REJECTION OF *COLUBER CHIAMETLA* SHAW, 1802. Z.N.(S.) 1704
(see volume 22, pages 235–236)

By James A. Peters (*U.S. National Museum, Washington, D.C.* 20560, *U.S.A.*)

I would like to be placed on record as in opposition to this proposal. If H. M. Smith is convinced that *C. chiametla* is identical with *Drymobius margaritiferus*, as he seems to be, he should apply the Law of Priority and use the older name. I know of no reference to the snake *Drymobius margaritiferus* outside the systematic herpetological literature, and there are comparatively few references to the species within that literature. The name *margaritiferus* is not a widely known, widely used name, familiar to non-herpetologists, and no basic confusion would result from the change to *chiametla*, so the basic reasons for use of the plenary powers do not exist.

In addition, there would be no major changes in names if priority were followed. If *chiametla* is used, the names of the two subspecies within the species would be *Drymobius chiametla chiametla* and *D. c. margaritiferus*, thus retaining the latter name. The only name to be lost would be *D. margaritiferus fistulosus*, which would become a synonym of *chiametla*. All of the names involved would still be available for a later investigator who might not agree with Smith's interpretation of the plates, figures, comments, and Latin. I suggest that the Commission reject this petition, and recommend standard procedures using the Law of Priority.

ON THE PROPOSED DESIGNATION UNDER THE PLENARY POWERS OF NEOTYPES FOR *ANTHOCORIS NIGRELLUS* ZETTERSTEDT, 1838, *ANTHOCORIS NIGRICORNIS* ZETTERSTEDT, 1838 AND *LYGAEUS PYGMAEUS* FALLÉN, 1807 (INSECTA, HEMIPTERA). Z.N.(S.) 1732
(see volume 23, pages 121–123)

By I. M. Kerzhner (*Zoological Institute, Academy of Sciences of the USSR, Leningrad, USSR*)

Some additions and corrections should be made to the proposition of J. Péricart.

1. The original description of *Lygaeus pygmaeus* Fallén, 1807 (p. 73) is: " *Niger* nitidus, *elytris testaceis, membrana albida. Fem.* Valde affinis praecedenti [*Anthocoris nemorum* (Linnaeus, 1758)] at minor, corpore scilicet breviori *magis ovato*; *antennis longioribus*, basi, *elytris totis*, tibiisque *testaceis. Membrana vel immaculata, vel fuscopunctata: punctis minutis.* Thorax transversim subsulcatus " (my italics—I.K.).

This description is in a complete disaccordance with the " types " from Lund Museum studied by J. Péricart, one male (!) and one female of *Anthocoris minki* Dohrn, 1860, a species with body more slender and parallel-sided, than in *Anthocoris nemorum*, head and pronotum reddish, elytrae distally black or brownish, membrane greyish with a white fascia or 2–3 large white spots and antennae shorter than in *Anthocoris nemorum*. According to Péricart (1966, p. 189) the single label of these specimens is " *L. lucorum* Fall." (sic!) in the handwriting of Zetterstedt (!).

It is absolutely evident, that the " types " discussed are only specimens misidentified by Zetterstedt, which have no value for interpretation of Fallén's species. The original description of *Lygaeus pygmaeus* corresponds perfectly to *Acompocoris pygmaeus* (Fallén) of Reuter and others and the correct modern concept of this species should not be changed because of the discovery of specimens misidentified by Zetterstedt. If it should be proved, that the true types of *Lygaeus pygmaeus* Fallén are lost, a designation of neotype for this species is possible, but not obligatory, because it is a well defined species with a unanimously agreed identity.

2. *Anthocoris lucorum* Fallén, 1829 (p. 67) and *Lygaeus pygmaeus* Fallén, 1807, are both described from female specimens collected by Gyllenhall in Vestrogothia. These names are however not objective but only subjective synonyms; it is clear from

many details including Fallén's own statement in the description of *Anthocoris lucorum*: " *Lygaeus pygmaeus* Mon. Cim. 73, 21 varietas (!) nigra, nitida hujus Speciei ". It is impossible to believe, that Fallén has described a species and its variety on the basis of the same specimen. The synonymy of both names is confirmed by Reuter (1871, p. 417), who indicated with " sec. spec. typic.", that he had studied the types of *A. lucorum* Fallén. Specimens from the Lund Museum with the label " *L. lucorum* Fall." in Zetterstedt's handwriting are apparently not the type-specimens of *A. lucorum*.

3. The identification of *Anthocoris nigrella* Zetterstedt, 1838 and *A. nigricornis* Zetterstedt, 1838, in the fundamental Monograph of Reuter (1884) is based on his previous paper (Reuter, 1871), one of his first papers, which he published at the age of 21 years. This can explain some mistakes made therein by the future eminent hemipterist.

The original description of *Anthocoris nigrella* Zetterstedt (1838, p. 265) corresponds perfectly to macropterous specimens of *Xylocoris cursitans* (Fallén, 1807), two females of which are designated as types of *Anthocoris nigrella* in the Lund Museum. Evidently these types should be regarded as correct.

Reuter (1871, 1884) made no indication, that he had seen the types of *Anthocoris nigrella*, but he stated (Reuter, 1871, p. 418), that he had studied specimens determined as *Anthocoris nigrellus* by Sahlberg (1848, p. 76). In the 1871 paper on page 411 the name *Anthocoris nigrella* is regarded as a junior synonym of *Piezostethus cursitans* (Fallén, 1807) (= *Xylocoris cursitans*), on page 418 the same name is considered as the valid name for *Temnostethus nigrellus*; however on the page 428 *Temnostethus nigrellus* is listed as *Temnostethus Bohemani* Reut. n. sp. These contradictions are explained by Reuter (1872, p. 47, footnote) as " lapsus calami ", but I suppose, that they have another origin: probably Reuter firstly correctly determined *Anthocoris nigrella* as a synonym of *Xylocoris cursitans* and intended to describe a new species *Temnostethus bohemani*, but finally followed the previous misidentification of Sahlberg and incorrectly attributed Zetterstedt's name to this species of *Temnostethus*, which was subsequently included by him in the genus *Elatophilus* Reuter and designated by Kirkaldy (1906, p. 120) as type-species of *Elatophilus*. It is clear from the above, that Reuter misidentified the species of Zetterstedt's species.

I consider that such inconsistent action as a designation of a neotype,* which contradicts the existing type-material and the original description, can be made only in exceptional cases for economically important or very well-known species. This is, however not the case. *Elatophilus nigrellus* sensu Reuter is a very rare and obscure species, which is known so far only from several specimens from Norway, Sweden and Finland and as I think it has never been redescribed or studied at modern level since Reuter's Monograph. In my opinion it is the best to follow the original description and the true type-specimens. In this case *Anthocoris nigrellus* Zetterstedt, 1838 should be synonymized with *Xylocoris cursitans* (Fallén, 1807) and a new species should be described for *Elatophilus nigrellus* sensu Sahlberg, 1848; Reuter, 1871, 1884 (not Zetterstedt, 1838). The name *Temnostethus bohemani* Reuter, 1871 published without description and subsequently declared as a lapsus calami for *Temnostethus nigrellus* sensu Reuter is apparently an unavailable name. Considerations on the type-species of *Elatophilus* are given below.

4. *Anthocoris nigricornis* Zetterstedt, 1838 (p. 266) is described as having " hemelytris testaceis immaculatis, membrana alba, fusco-maculata, tibiis luteis ". This description corresponds well with *Acompocoris* species (especially *A. pygmaeus*) and it is evident from other data too, that the types of *Anthocoris nigricornis* in the Lund Museum are correctly designated.

Reuter (1871, p. 419, footnote) stated, that the types of *Anthocornis nigricornis* are badly damaged and he attributed this name to specimens, which correspond well to the original description. The last statement is erroneous, as follows from Reuter's description of *Temnostethus nigricornis*: " hemelytris fusco-testaceis, cuneo picescente;

* In this connection I must note, that the specimen from " Karelia " proposed as neotype is not mentioned in Reuter's Monograph or his previous papers.

membrana fuscescente, basi dilutiore; tibiis ferrugineis ". Reuter's doubt concerning the identity of *A. nigricornis* is evident from his remarks on the page 419 (*Anthocoris nigricornis* Zetterstedt . . . verisimiliter ") and on the page 428 (" *Themnostethus nigricornis* Zett.?, Reut.").

Elatophilus nigricornis sensu Reuter is a relatively rare west-european species. As in the preceding case, I think that it is no need for the designation of a neotype for *Anthocoris nigricornis* Zetterstedt, 1838. In my opinion the species should be accepted according to the original description and existing types. In this case *Anthocoris nigricornis* Zetterstedt, 1838 should be synonymyzed with *Acompocoris pygmaeus* (Fallén, 1807) and the name *Elatophilus pinicola* (Frey-Gessner, 1862) should be validated for *Elatophilus nigricornis* sensu Reuter, 1871, 1884, not Zetterstedt, 1838.

5. There remains the problem of the type-species of *Elatophilus* Reuter, 1884. From three species originally included in this genus only *E. stigmatellus* (Zetterstedt, 1838) was correctly identified, which is proved by the examination of the type-specimens too. I think there is good reason to use the plenary powers of the Commission to set aside the inconvenient type-designation of Kirkaldy (1906) and to designate *Anthocoris stigmatellus* Zetterstedt, 1838, as type-species of the genus *Elatophilus* Reuter, 1884. This is the most common and widely distributed species of the genus.

If my propositions should be accepted, the corresponding Ruling should be:

(1) to set aside under the plenary powers all designations of type-species for the nominal genus *Elatophilus* Reuter, 1884, made prior to this Ruling, having done so, to designate *Anthocoris stigmatellus* (correction of *stigmatella*) Zetterstedt, 1838, as type-species for that genus;

(2) to place the generic name *Elatophilus* Reuter, 1884 (gender: masculine), type-species as fixed above under (1) *Anthocoris stigmatellus* Zetterstedt, 1838, on the Official List of Generic Names in Zoology ;

(3) to place the specific name *stigmatellus* Zetterstedt, 1838, as published in the binomen *Anthocoris stigmatella* (sic) (type-species of *Elatophilus* Reuter, 1884) on the Official List of Specific Names in Zoology.

References

Fallén, C. F. 1807. *Monographia Cimicum Sveciae*

—— 1829. *Hemiptera Sveciae, Contin. iii*

Kirkaldy, G. W. 1906. List of the Genera of the Pagiopodous Hemiptera-Heteroptera, with their Type-species, from 1758 to 1904. *Trans. Amer. ent. Soc.* **32** : 117–156

Pericart, J. 1966. Acompocoris pygmaeus (Fallén) et A. alpinus Reuter constituent-ils deux espèces distinctes? *Bull Soc. ent. France* **71** : 186–199

Reuter, O. M. 1871. Skandinaviens och Finlands Acanthiider. *Öfv. K. Vet.-Ak. Förhandl.* 1871 : 403–429

—— 1872. Skandinaviens och Finlands Aradider. *Öfv K. Vet.-Ak. Förhandl.* 1872 : 47–62

—— 1884. *Monographia Anthocoridarum Orbis Terrestris*

Sahlberg, R. F. 1848. *Monographia Geocorisarum Fenniae.*

Zetterstedt, J. W. 1838. *Insecta Lapponica*

WITHDRAWAL OF THE PROPOSAL TO SUPPRESS *VESPERTILIO SUBULATUS* SAY UNDER THE PLENARY POWERS. Z.N.(S.) 1701

(see volume 22, pages 204–205)

By Bryan P. Glass (*Oklahoma State University, Stillwater, U.S.A.*)

Some months ago Mr. Robert J. Baker and I submitted a proposal to the Commission relative to the American bats *Myotis subulatus* and *Myotis yumanensis*. Since that time there has been considerable opposition to this proposal generated among mammalogists in North America, particularly because this seems to be proposing a nomenclatural solution to what is basically a taxonomic problem. With this position we agree, and note further that such a proposal unjustifiably establishes the name *Myotis yumanensis* by placing it on the Official List, whereas such action ought not to be taken since it unnecessarily protects the name *yumanensis* from further nomenclatural examination to which it might very reasonably be subjected at some future date. We therefore wish to retract our proposal and will express our opinion regarding the status of these names through the normal channels of publication.

COMMENT ON THE APPLICATION TO PLACE FISCHER'S NAMES FOR D'AZARA'S RODENTS ON THE OFFICIAL LIST. Z.N.(S.) 1774

(see volume 23, pages 285–288)

By Curtis W. Sabrosky (*Entomology Research Division, U.S. Department of Agriculture, Washington, D.C., U.S.A.*)

When Fischer used such expressions as " *Mus tarso nigro* " and " *Mus laucha* et *lauchita*," are these not non-binominal names? Does this not becloud the status of the work as a whole (Article 11c)?

Actually, on page 71, Fischer may not have been giving formal Latin scientific names to the species of *Mus*. He was listing names from the literature, and for d'Azara he was translating them directly into Latin (e.g., " *Mus tarso nigro* " for " *Rat a Tarse Noir* "). It is true that they are italicized, but that was his format for the names referred to, regardless of language or form, as in such names, in the same list, as " *Norway rat, brown rat* " (p. 69) and " *Malot* ", " *Field-rat* ", and " *Skogsmus* " (p. 65).

I note also that in a synopsis at the beginning of the volume, Fischer sometimes uses different names than in the text, and furthermore in most cases apparently really Latinizes them as scientific names. For example:

	Synopsis	Text
p. vii	*Mus nigritarsis*	*Mus tarso nigro* (which, by the way, violates Article 11g)!
p. xi	*Mustela*, species dubiae:	Under *Mustela*:
	Ictis Veterum	*L'ictis des Anciens*
	Sardiniae	*L'ictis de Sardaigne*
p. xvii	*Cervus Cuguacuete*	*Cougoua couété*

If any names were to be adopted as Fischer's Latin rendering of d'Azara's names, it would seem that those in the Synopsis are more proper for consideration.

I hope that this work will be scrutinized carefully by mammalogists and nomenclaturists, before a decision is reached on the Fischer names.

COMMENT ON THE PROPOSED BACK-DATING OF *COLLIGNONICERAS* BREISTROFFER. Z.N.(S.) 1738

(see volume 23, pages 57–59)

By Curtis W. Sabrosky (*Entomology Research Division, U.S. Department of Agriculture, Washington, D.C., U.S.A.*)

Questions will arise from time to time on the status of decisions made under provisions that existed only briefly in the Code (e.g., Article 39a, involved in the present case). At stake will be any usage based on such a decision, versus application of the

Code uniformly in time. In my opinion, it is highly desirable that we maintain uniformity in our treatment as far as possible. Hopefully, the number of cases involving such a short-lived provision as Art. 39a will not be great, nor the usage serious, so that we may treat such problems as if 39a had never been published. It was unwise, and it was deleted from the Code as soon as possible.

Obviously, inasmuch as that Section stood in the Code for only a few years (1961–64), and very recent years at that, and because the name *Collignoniceras* dates only from 1947, no long-established nor great amount of usage can be involved.

As for application of the Rules, adoption by Wright (1957) of *Collignoniceras*, 1947, over *Selwynoceras*, 1940, was incorrect at the time, as the applicants admit. Furthermore, and contrary to the statement of the applicants, Breistroffer (1947) was quite correct for his time (and would be correct now) in replacing Prionotropidae Zittel (based on *Prionotropis* Meek, preoccupied) with an available synonym, Prionocyclidae, that applied to the same family. Wright and Wright (1951) publishing long before the new Code, were incorrect in proposing and substituting the name Collignoniceratidae.

Is the case really serious enough to warrant Suspension of the Rules for the back-dating of *Collignoniceras*? Back-dating is a bibliographical anachronism, and the strong objection to it was responsible for the rejection of Article 39's Section (a). Is not that same objection valid against the proposed action?

In general, unless the usage is undeniably of vast extent and importance, I believe it better to maintain uniform application of the Rules as if the 1961–64 interlude of Article 39a did not exist. As regards *Collignoniceras*, I would deny the application and maintain the actual date of publication.

OPINION 813

FAVIPHYLLUM RUGOSUM HALL, 1852 (ANTHOZOA): SUPPRESSION OF GENERIC AND SPECIFIC NAMES UNDER THE PLENARY POWERS

RULING.—(1) Under the plenary powers the following names are hereby suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy:

(a) the generic name *Faviphyllum* Hall, 1852;

(b) the specific name *rugosum* Hall, 1852, as published in the binomen *Faviphyllum rugosum*.

(2) The generic name *Faviphyllum* Hall, 1852 (as suppressed under the plenary powers in (1)(a) above) is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology with the Name Number 1907.

(3) The specific name *rugosum* Hall, 1852, as published in the binomen *Faviphyllum rugosum* (as suppressed under the plenary powers in (1)(b) above) is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology with the Name Number 882.

HISTORY OF THE CASE (Z.N.(S.) 1662)

The present case was submitted to the office of the Commission in September 1964 by Dr. William J. Sando. Dr. Sando's application was sent to the printer on 29 September 1964 and was published on 5 April 1965 in *Bull. zool. Nomencl.* **22** : 55–56. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184). The application was supported by Dr. Edward C. Wilson, Prof. R. L. Langenheim, Jr., and Dr. E. W. Bamber.

DECISION OF THE COMMISSION

On 25 January 1967 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (67)1 either for or against the proposals set out in *Bull. zool. Nomencl.* **22** : 56. At the close of the prescribed voting period on 25 April 1967 the state of the voting was as follows:

Affirmative votes—twenty-one (21), received in the following order: Brinck, Holthuis, China, Mayr, Lemche, Munroe, Boschma, Vokes, Tortonese, Uchida, Sabrosky, Bonnet, Obruchev, Binder, Evans, Mertens, Kraus, Stoll, Forest, Ride, Alvarado.

Negative votes—none (0).

Voting Papers not returned—three (3): Hubbs, Jaczewski, Simpson.

Prof. do Amaral returned a late affirmative vote.

Original References

The following are the original references for names placed on Official Indexes by the Ruling given in the present Opinion:

Faviphyllum Hall, 1852, Geology and Paleontology. *In* Stansbury, Howard, Exploration and survey of the valley of the Great Salt Lake of Utah, including

a reconnaissance of a new route through the Rocky Mountains, *U.S.* 32*nd Congress Special Session*, *Senate Executive Document* 3 : 407, pl. 1, figs. 1a, 1b

rugosum, *Faviphyllum*, Hall, 1852, *loc. cit.*

CERTIFICATE

We certify that the votes cast on Voting Paper (67)1 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 813.

G. OWEN EVANS
Secretary

W. E. CHINA
Assistant Secretary

International Commission on Zoological Nomenclature
London
1 *May* 1967

OPINION 814

ORNIPHOLIDOTOS BETHUNE BAKER, 1914 (INSECTA, LEPIDOPTERA): DESIGNATION OF A TYPE-SPECIES UNDER THE PLENARY POWERS

RULING.—(1) Under the plenary powers all designations of type-species for the nominal genus *Ornipholidotos* Bethune Baker, 1914, made prior to the present Ruling are hereby set aside, and the nominal species *Pentila kirbyi* Aurivillius, 1895, is hereby designated as type-species of that genus.

(2) The generic name *Ornipholidotos* Bethune Baker, 1914 (gender : masculine), type-species, by designation under the plenary powers in (1) above, *Pentila kirbyi* Aurivillius, 1895, is hereby placed on the Official List of Generic Names in Zoology with the Name Number 1757.

(3) The specific name *kirbyi* Aurivillius, 1895, as published in the binomen *Pentila kirbyi* (type-species of *Ornipholidotos* Bethune Baker, 1914) is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2198.

HISTORY OF THE CASE (Z.N.(S.) 1663)

The present case was submitted to the office of the Commission by Prof. H. Stempffer in October 1964. Prof. Stempffer's application was sent to the printer on 4 December 1964 and was published on 5 April 1965 in *Bull. zool. Nomencl.* **22** : 57. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184) and to eight entomological serials. No comment was received.

DECISION OF THE COMMISSION

On 25 January 1967 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (67)2 either for or against the proposals set out in *Bull. zool. Nomencl.* **22** : 57. At the close of the prescribed voting period on 25 April 1967 the state of the voting was as follows:

Affirmative votes—twenty-two (22), received in the following order: Brinck, Holthuis, China, Mayr, Lemche, Munroe, Boschma, Vokes, Tortonese, Jaczewski, Uchida, Sabrosky, Bonnet, Obruchev, Binder, Evans, Mertens, Kraus, Stoll, Forest, Ride, Alvarado.

Negative votes—none (0).

Voting Papers not returned—two (2): Hubbs, Simpson.

Prof. do Amaral returned a late affirmative vote.

Original References

The following are the original references for names placed on Official Lists by the Ruling given in the present Opinion:

kirbyi, Pentila, Aurivillius, 1895, *Ent. Tidskr.* **16** : 198

Ornipholidotos Bethune Baker, 1914, *Trans. ent. Soc. London* **1914** : 319

CERTIFICATE

We certify that the votes cast on Voting Paper (67)2 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 814.

G. OWEN EVANS
Secretary

W. E. CHINA
Assistant Secretary

International Commission on Zoological Nomenclature
London
1 *May* 1967

OPINION 815

SYNAPTIPHILUS CANU & CUÉNOT, 1892 (CRUSTACEA, COPEPODA): VALIDATED UNDER THE PLENARY POWERS

RULING.—(1) Under the plenary powers the generic name *Colaceutes* Hartmann, 1856, is hereby suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy.

(2) The generic name *Synaptiphilus* Canu & Cuénot, 1892 (gender : masculine), type-species, by monotypy, *Synaptiphilus luteus* Canu & Cuénot, 1892, is hereby placed on the Official List of Generic Names in Zoology with the Name Number 1758.

(3) The specific name *luteus* Canu & Cuénot, 1892, as published in the binomen *Synaptiphilus luteus* (type-species of *Synaptiphilus* Canu & Cuénot, 1892) is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2199.

(4) The generic name *Colaceutes* Hartmann, 1856, (as suppressed under the plenary powers in (1) above) is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology with the Name Number 1908.

HISTORY OF THE CASE (Z.N.(S.) 1664)

The present case was submitted to the office of the Commission by Dr. Lucien Laubier and Dr. Jan H. Stock in September 1964. The application was sent to the printer on 4 December 1964 and was published on 5 April 1965 in *Bull. zool. Nomencl.* **22** : 58–59. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184) and to one specialist serial. The proposals were supported by Dr. R. U. Gooding (*Bull. zool. Nomencl.* **22** : 296–297).

DECISION OF THE COMMISSION

On 25 January 1967 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (67)3 either for or against the proposal set out in *Bull. zool. Nomencl.* **22** : 59. At the close of the prescribed voting period on 25 April 1967 the state of the voting was as follows:

Affirmative votes—twenty-one (21), received in the following order: Brinck, Holthuis, China, Mayr, Lemche, Munroe, Boschma, Vokes, Jaczewski, Tortonese, Uchida, Sabrosky, Bonnet, Obruchev, Binder, Evans, Mertens, Kraus, Stoll, Forest, Alvarado.

Negative votes—one (1): Ride.

Voting Papers not returned—two (2): Hubbs, Simpson.

Prof. do Amaral returned a late affirmative vote.

In returning his negative vote Dr. Ride made the following comment: " There is no doubt in the minds of either the applicants or Dr. Gooding that *Colaceutes* and *Synaptiphilus* are subjective synonyms and neither expect the rediscovery of *C. muelleri* to cause subjective separation of the two generic taxa. I do not agree that instability or confusion will result from this straightforward

replacement through synonymy. This is an obscure group of animals which has a literature (according to the applicants) of 14 papers and of these 6 are by one of the applicants or his co-worker; in the last 50 years, 3 papers have been published by other authors and of these one has used *Colaceutes*."

ORIGINAL REFERENCES

The following are the original references for names placed on the Official Lists and Index by the Ruling given in the present Opinion:

Colaceutes Hartmann, 1856, *Dissertatio inauguralis hist. nat. Univ. Frédéric-Guillaume* (ed. Fr. Guil. Nietack)

luteus, Synaptiphilus, Canu & Cuénot, 1892, *in* Cuénot, *Rev. Biol. Nord. France* **5** : 19, 21–22

Synaptiphilus Canu & Cuénot, *in* Cuénot, 1892, *Rev. Biol. Nord. France* **5** : 19, 21–22

CERTIFICATE

We certify that the votes cast on Voting Paper (67)3 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 815.

G. OWEN EVANS
Secretary

W. E. CHINA
Assistant Secretary

International Commission on Zoological Nomenclature
London
1 *May* 1967

OPINION 816

ERETMIA GOSSE, 1886 (? ROTATORIA): SUPPRESSED UNDER THE PLENARY POWERS

RULING.—(1) Under the plenary powers the following names are hereby suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy:

(a) the generic name *Eretmia* Gosse, 1886;

(b) the specific name *pentathrix* Gosse, 1886, as published in the binomen *Eretmia pentathrix;*

(c) the specific name *trithrix* Gosse, 1886, as published in the binomen *Eretmia trithrix.*

(2) The following generic names are hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology with the Name Numbers specified:

(a) *Eretmia* Gosse, 1886 (as suppressed under the plenary powers in (1)(a) above) (Name No. 1909);

(b) *Ertemia* Hood, 1888 (an incorrect spelling for *Eretmia* Gosse, 1886) (Name No. 1910);

(c) *Ertemias* Hood, 1888 (an incorrect spelling for *Eretmia* Gosse, 1886) (Name No. 1911).

(3) The following specific names are hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology with the Name Numbers specified:

(a) *pentathrix* Gosse, 1886, as published in the binomen *Eretmia pentathrix* (as suppressed under the plenary powers in (1)(b) above) (Name No. 883);

(b) *trithrix* Gosse, 1886, (as published in the binomen *Eretmia trithrix* (as suppressed under the plenary powers in (1)(c) above) (Name No. 884).

HISTORY OF THE CASE (Z.N.(S.) 1666)

The present case was submitted to the office of the Commission by Dr. G. Evelyn Hutchinson in October 1964. Dr. Hutchinson's application was sent to the printer on 4 December 1964 and was published on 5 April 1965 in *Bull. zool. Nomencl.* **22** : 60–62. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184). No comment was received.

DECISION OF THE COMMISSION

On 25 January 1967 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (67)4 either for or against the proposals set out in *Bull. zool. Nomencl.* **22** : 61–62. At the close of the prescribed voting period on 25 April 1967 the state of the voting was as follows:

Affirmative votes—nineteen (19), received in the following order: Holthuis, China, Mayr, Lemche, Munroe, Boschma, Vokes, Tortonese, Uchida, Bonnet,

Obruchev, Binder, Evans, Jaczewski, Mertens, Kraus, Stoll, Forest, Alvarado.

Negative votes—three (3): Brinck, Sabrosky, Ride.

Voting Papers not returned—two (2): Hubbs, Simpson.

Prof. do Amaral returned a late affirmative vote.

In returning his affirmative vote Prof. T. Jaczewski drew attention to papers by Harring, 1913 (*Bull. U.S. nat. Mus.* **81** : 46) and Wiszniewski, 1955 (*Pol. Arch. Hydrobiol.* **2**(XV), No. 2: 127) who rejected *Eretmia* Gosse. The following comments were made by Commissioners returning negative votes:

Prof. P. Brinck (30.i.67): Details in the application show that the taxonomic position of the animal in question is unclear. Two recent authors (de Beauchamps and Remane) have brought it among the Gastrotricha but it is evident that we know far too little to settle the question. Since there would be a fair chance of finding the species again in some pool at the Sandhurst Military College and since the author expressly says that for the present there are no nomenclatural disturbances caused by the name, I see no reason to suppress it.

Dr. C. W. Sabrosky (29.iii.67): " These names do not, at the moment, pose any challenge to existing nomenclature. The possibility exists that they might be perfectly good names for uncommon species. Further, I am impressed by the applicants statement that the illustration of *Eretmia pentathrix* ' probably ' permits its recognition; should this not have been investigated? "

Dr. W. D. L. Ride (24.iv.67): " The applicant gives no evidence that there has been a proper attempt to establish the identity of the type-species of *Eretmia*; moreover, there is at present no disturbance of stability or universality or even of confusion but merely a ' slight but definite possibility of the disturbance of the generic nomenclature in some groups of microscopic fresh-water organisms." I do not believe that this is sufficient authority for the Commission to use the plenary powers.

ORIGINAL REFERENCES

The following are the original references for names placed on Official Indexes by the Ruling given in the present Opinion:

Eretmia Gosse, 1886, *in* Hudson & Gosse, *The Rotifera or Wheel Animalcules both British & Foreign* **2** : 128

Ertemia Hood, 1888, *Science Gossip* **24** : 28

Ertemias Hood, 1888, *Science Gossip* **24** : 27

pentathrix, Eretmia, Gosse, 1886, *in* Hudson & Gosse, *The Rotifera or Wheel Animalcules both British & Foreign* **2** : 128, pl. 29, fig. 12

trithrix, Eretmia, Gosse, 1886, *in* Hudson & Gosse, *The Rotifera or Wheel Animalcules both British & Foreign* **2** : 134, p. 28, fig. 2

CERTIFICATE

We certify that the votes cast on Voting Paper (67)4 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 816.

G. OWEN EVANS
Secretary

W. E. CHINA
Assistant Secretary

International Commission on Zoological Nomenclature

London 2 *May* 1967

OPINION 817

CANCER SETIFERUS LINNAEUS, 1767 (CRUSTACEA, DECAPODA): VALIDATION OF A NEOTYPE UNDER THE PLENARY POWERS

RULING.—(1) Under the plenary powers the selection by Burkenroad (1939, *Bull. Bingham oceanogr. Coll.* **6**(6) : 17) of the ♂ specimen numbered B.O.C. 237 to be the neotype of *Cancer setiferus* Linnaeus, 1767, is hereby validated.

(2) The following specific names are hereby placed on the Official List of Specific Names in Zoology with the Name Numbers specified:

(a) *setiferus* Linnaeus, 1767, as published in the binomen *Cancer setiferus*, as interpreted by the neotype designation by Burkenroad, 1939, validated under the plenary powers in (1) above (Name No. 2200);

(b) *schmitti* Burkenroad, 1936, as published in the binomen *Penaeus schmitti* (Name No. 2201).

HISTORY OF THE CASE (Z.N.(S.) 1617)

The present case was submitted to the office of the Commission by Dr. L. B. Holthuis in November 1963. Dr. Holthuis' application was sent to the printer on 28 February 1964 and was published on 7 August 1964 in *Bull. zool. Nomencl.* **21** : 227–229. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184) and to one specialist serial.

Objections to the proposals by Dr. Gordon Gunter were published in *Bull. zool. Nomencl.* **21** : 229–232 and **23**: 76–79. An answer to Dr. Gunter's objection by Dr. Holthuis was published in *Bull. zool. Nomencl.* **21** : 232–234. Dr. Holthuis' proposals were supported by Dr. A. R. Smalley (*Bull. zool. Nomencl.* **22** : 139) and Dr. Gunter's objections by Dr. R. M. Ingle (*Bull. zool. Nomencl.* **21** : 232).

DECISION OF THE COMMISSION

On 25 January 1967 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (67)6 either for or against the proposal set out in *Bull. zool. Nomencl.* **21** : 229. At the close of the prescribed voting period on 25 April 1967 the state of the voting was as follows:

Affirmative votes—twenty-one (21), received in the following order: Holthuis,* Brinck, China, Mayr, Lemche, Jaczewski, Munroe, Boschma, Vokes, Tortonese, Uchida, Sabrosky, Bonnet, Obruchev, Binder, Evans, Mertens, Kraus, Forest, Ride, Alvarado.

Negative votes—one (1): Stoll.

Voting Papers not returned—two (2): Hubbs, Simpson.

Prof. do Amaral returned a late affirmative vote.

The following comments were made by Commissioners in returning their votes:

* Dr. Holthuis requested that he be counted with the majority

Prof. P. Brinck (1.ii.67): " As far as I can see there would be no need for an action by the Commission under its plenary powers (cf. Holthuis in *Bull. zool. Nomencl.* **21** : 232) since Burkenroad's action must be valid. On the other hand the vitriolic discussion demands an end and the simplest way is to confirm (and definitely validate) Burkenroad's action."

Dr. C. W. Sabrosky (29.iii.67): " I think Gunter has the better of the argument on the probable provenance of the original material of *setiferus* Linnaeus but the proposed action is requested under plenary powers, and it will serve to preserve the widely used name of a commercially important shrimp."

ORIGINAL REFERENCES

The following are the original references for names placed on the Official List by the Ruling given in the present Opinion:

schmitti, Penaeus, Burkenroad, 1936, *Annaes Acad. Brasil. Sci.* **7**(4) : 315

setiferus, Cancer, Linnaeus, 1767, *Syst. Nat.* (ed. 12) **1** : 1054

CERTIFICATE

We certify that the votes cast on Voting Paper (67)6 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 817.

G. OWEN EVANS
Secretary

W. E. CHINA
Assistant Secretary

International Commission on Zoological Nomenclature
London
2 *May* 1967

OPINION 818

ZORILLA I. GEOFFROY, 1826 (MAMMALIA): SUPPRESSED UNDER THE PLENARY POWERS

RULING.—(1) Under the plenary powers the generic name *Zorilla* I. Geoffroy, 1826, is hereby suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy.

(2) Under the plenary powers the neotype specimen for *Viverra zorilla* Schreber, 1776, designated by Van Gelder, 1966, is hereby validated.

(3) The generic name *Ictonyx* Kaup, 1835 (gender : masculine), type-species by monotypy, *Ictonyx capensis* Kaup, 1835, is hereby placed on the Official List of Generic Names in Zoology with the Name Number 1759.

(4) The specific name *striatus* Perry, 1810, as published in the binomen *Bradypus striatus*, is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2202.

(5) The generic name *Zorilla* I. Geoffroy, 1826 (as suppressed under the plenary powers in (1) above) is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology with the Name Number 1912.

HISTORY OF THE CASE (Z.N.(S.) 758)

An application for the suppression of the generic name *Zorilla* was first published in the form of a Report by Dr. W. E. China, Assistant Secretary to the Commission, on 10 September 1962 in *Bull. zool. Nomencl.* **19** : 284–289. The early history of the present case is set out in that Report. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184) and to two specialist serials.

Comments by Dr. L. B. Holthuis, Dr. P. Hershkovitz, Dr. J. Dorst, and Dr. E. Raymond Hall (*Bull. zool. Nomencl.* **20** : 241–245) included a counter-proposal by Hershkovitz and resulted in a withdrawal by China of paras. (5)(b), (6) and part of (1)(b) of his proposal. In a further note (*op. cit.* **22** : 17–18) China proposed a neotype for *Viverra zorilla* Gmelin, 1788, which, after comment by Dr. Richard G. Van Gelder (*op. cit.* **22** : 278–280), he later withdrew. A final comment by Dr. P. Hershkovitz was published in *Bull. zool. Nomencl.* **23** : 74.

DECISION OF THE COMMISSION

On 25 January 1967 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (67)9, in Part 1 either for or against the use of the plenary powers in the present case. In Part 2 of the same Voting Paper Commissioners were invited to vote either for Alternative A (Van Gelder's proposals, *Bull. zool. Nomencl.* **22** : 179, with the exception of the addition of *Viverra zorilla* Schreber to the Official List) or for Alternative B (China's proposals, *Bull. zool. Nomencl.* **19** : 289, with the addition of Van Gelder's neotype designation for *V. zorilla* Schreber and the deletion of paras. (1)(b), (5) and (6)). At the close of the prescribed voting period on 25 April 1967 the state of the voting was as follows:

Part 1. Affirmative votes—twenty (20), received in the following order: Holthuis, China, Mayr, Lemche, Munroe, Boschma, Vokes, Tortonese, Jaczewski, Uchida, Sabrosky, Bonnet, Obruchev, Binder, Evans, Mertens, Kraus, Stoll, Forest, Ride.

Negative votes—one (1): Alvarado.

Part 2. Votes for Alternative A—seven (7): China, Uchida, Binder, Mertens, Kraus, Forest, Ride.

Votes for Alternative B—thirteen (13): Holthuis, Mayr, Lemche, Munroe, Boschma, Vokes, Tortonese, Jaczewski, Sabrosky, Bonnet, Obruchev, Evans, Stoll.

Voting Papers not returned—two (2): Hubbs, Simpson.

Prof do Amaral returned a late affirmative vote.

Original References

The following are the original references for names placed on Official Lists and Index by the Ruling given in the present Opinion:

Ictonyx Kaup, 1835, *Das Thierr.* **1** : 352

striatus, *Bradypus*, Perry, 1810, *Arcana*: sign. Y1

Zorilla I. Geoffroy, 1826, *Dict. Class. Hist. nat.* **10** : 215

The following is the original reference for the designation of a neotype for a species concerned in the present case:

For *Viverra zorilla* Schreber, 1776: R. G. Van Gelder, 1966, *Bull. zool. Nomencl.* **22** : 278

CERTIFICATE

We certify that the votes cast on Voting Paper (67)9 were cast as set out above, that the proposal contained in that Voting Paper as Alternative B has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 818.

G. OWEN EVANS
Secretary

W. E. CHINA
Assistant Secretary

International Commission on Zoological Nomenclature
London
3 *May* 1967

AN APPEAL FOR STABILIZATION OF CERTAIN NAMES IN THE PROTOZOAN FAMILY TETRAHYMENIDAE (SUBPHYLUM CILIOPHORA, ORDER HYMENOSTOMATIDA), WITH SPECIAL REFERENCE TO THE GENERIC NAME *TETRAHYMENA* FURGASON, 1940. Z.N.(S.) 625

By John O. Corliss, Ph.D.[1] (*Department of Biological Sciences, University of Illinois at Chicago Circle, Box* 4348, *Chicago, Illinois* 60680) and Ellsworth C. Dougherty, Ph.D., M.D.* (*Department of Nutritional Sciences, University of California, Berkeley, California* 94720)

I. Introduction:

1. In the past 25–30 years the scientific community has seen an unprecedented growth in research on the physiology (especially biochemistry) of ciliate Protozoa (see the series of volumes by Lwoff, 1951, Hutner and Lwoff, 1955, Hutner, 1964; and also references in Corliss, 1954a, 1965). The most profoundly studied ciliates have been several strains of the species for which the best name, in our opinion, is *Tetrahymena pyriformis* (Ehrenberg, 1830 (: 96)), Lwoff, 1947 (: 103) (syn. *Leucophrys pyriformis* Ehrenberg, 1830). According to recent counts (Corliss, 1954a, 1957, 1965), investigations on the biology of this and a few congeneric species have yielded approximately 1500 published works, of which a majority have been physiologically, as opposed to morphologically, oriented—definitive studies in the latter category having, moreover, been carried out largely in the last decade. The consequence of the historical lag in morphological behind physiological research on *T. pyriformis* and its congeners is that their literature up to the last decade was in a state of taxonomic and nomenclatural chaos, with *T. pyriformis* itself masquerading, in the last 30 to 40 years alone, under at least thirteen names (see Corliss, 1952a, 1953a).

2. It was, in fact, the eruption of work of a physiological nature that made imperative the study of the morphology, taxonomy, and nomenclature of members of the *Tetrahymena*-group,[2] or family Tetrahymenidae Corliss, 1952 (1952d : 4). The reason for the recency of definitive morphological studies on these (and many other) free-living ciliates—organisms long known with an extensive 19th and 20th century literature—is simply given: techniques adequate to reveal the detailed structure have come into general use only in relatively recent years (see Corliss, 1963). Most of the early descriptions (of the 18th and 19th centuries) were very crude, often insufficient to permit the certain recognition of species—and not infrequently of genera. Comparable difficulties even obtain with certain descriptions of the past few decades. The literature is therefore replete with doubtful names, and nomenclatural problems will doubtless plague the taxonomy of ciliates for some years to come.

[1] Work supported, in part, by National Science Foundation grants to the senior author; we are also indebted to Mrs. Patricia Williams for editorial assistance.

[2] One of us (J.O.C.) designated this assemblage of ciliates as the " *Colpidium-Glaucoma-Leucophrys-Tetrahymena* ", or " C-G-L-T ", group in a series of papers (see Corliss, 1950, 1951a, b, 1952a, 1953a), but this is shortened to " *Tetrahymena*-group " in the present paper.

* Deceased 21 December 1965.

3. For over fifteen years, we, the authors, have exchanged views on the nomenclature of the *Tetrahymena*-group. The status of the generic name *Tetrahymena* Furgason, 1940 (: 258), has been of particular concern. Some years ago a thorough-going study of the literature revealed the fact to one of us (Corliss, 1953a : 66) that, contrary to an earlier conclusion (Corliss, 1952a, b), this generic name cannot be used for the species *T. pyriformis* and its congeners under the usual application of the International Code of Zoological Nomenclature. Evaluation of a number of earlier nominal genera yielded evidence that several names antedate *Tetrahymena* as possible, or definite, subjective synonyms thereof. Sharing an interest in preserving the widely used generic name *Tetrahymena*, we decided (Corliss and Dougherty, 1955) to make a joint appeal to the International Commission on Zoological Nomenclature in order to secure this; and, in making a comprehensive nomenclatural survey, we soon found that a conscientious attempt to resolve the problems connected with *Tetrahymena* led us into a veritable labyrinth of taxonomic and nomenclatural difficulties, especially those inherent in the evaluation of a substantial body of early literature extending back into the latter half of the 18th century. Although in the present paper our fundamental concern is with questions of nomenclature, we cannot avoid taking up taxonomic problems as well, some of which are *sub judice* at our present state of knowledge.

4. In finally formulating the present appeal to the International Commission, we hope not only to obtain, ultimately, a ruling resolving crucial problems in the nomenclature of the *Tetrahymena*-group, but also to stimulate other workers in ciliate taxonomy to submit to the International Commission proposals for the appropriate solution of similar nomenclatural problems—namely, those arising wherever changes required under strict application of the Code threaten to upset long-established and/or widely used generic or specific names.

5. Our several years of dealing both with the voluminous older literature, essential to a nomenclatural analysis of the *Tetrahymena*-group, and with the ever-growing modern literature devoted to these organisms, in all phases of their biology, have served to reinforce our major conviction with respect to the nomenclature of the group, and we can accordingly reaffirm the contention of one of us (Corliss, 1953a) that stability and uniformity of nomenclatural usage are best served if the generic name *Tetrahymena* is preserved through the invocation, by the International Commission, of its plenary powers to accomplish this.[3]

6. Thus, in order to secure the preservation of *Tetrahymena* Furgason, 1940, as a valid generic name with type-species *T. geleii* Furgason, 1940 (subjective junior synonym of *Leucophrys pyriformis* Ehrenberg, 1830), it is necessary to suppress the application of a number of earlier names actually or potentially available for a taxonomic genus to include *T. geleii*. (In the discussion that

[3] It may seem strange to workers in some fields that we are hereby appealing for the retention of a name only 27 years old (at the time of submitting this application). Such is eloquent testimony of the fact that a tremendous growth in the literature on these organisms has taken place in but two decades and that, also, knowledge of their nomenclature, which is a reflection of knowledge of their taxonomy, has, until recently, lagged behind the mushrooming studies of their physiology.

follows we refer to this species as *T. pyriformis*, since that is the name by which, in our opinion, it should be known.) The problem is made especially complex by the fact that certain of the nominal genera involved do not have the same type-species as *Tetrahymena* and that for various reasons some workers have expressed disagreement with the view that all these species are congeneric with *T. pyriformis*. The history of *T. pyriformis* provides an excellent example of the problems that can arise in the determination of nomenclaturally correct names for ciliates. Fortunately, the chaos of 25 years ago (and earlier), when this organism was appearing in print under a variety of names, has been largely resolved and the name *T. pyriformis* (or much less often now, *T. geleii*) has been generally adopted. However, we have found, on careful study, that at least two specific names antedating *pyriformis* Ehrenberg, 1830 (: 96) constitute possible subjective senior synonyms of Ehrenberg's specific name. (See, especially, paragraphs 37 and 38). Again, invocation by the International Commission of its plenary powers in this instance to secure *pyriformis* would, we feel, be the best solution.

7. A third important nomenclatural problem in the *Tetrahymena*-group concerns the specific name *patula* as used by Ehrenberg (1830 : 96—in the combination *Leucophrys patula*). It applies to a species congeneric, in our view, with *T. pyriformis*. In this instance, the name *patula* did not originate with Ehrenberg, but with O. F. Müller (1786 : 181), who applied it to a composite species. Details are given in paragraphs 40–45. We again feel that Ehrenberg's usage, which is that universally followed today, should be preserved by the International Commission acting under its plenary powers.

8. Thus we seek from the International Commission, acting under its plenary powers, ruling that will secure three important names—*Tetrahymena* Furgason, 1940, at the generic level, and *pryiformis* Ehrenberg, 1830, and *patula, sensu* Ehrenberg, 1830, at the specific level—all as they are generally used today. Logically arising, as well, are certain related actions that the International Commission should, or could, take—suppression of certain names under plenary powers and additions to the appropriate Official Lists and Official Indexes. We believe that all these problems can be satisfactorily resolved by the promulgation of an Opinion by the International Commission.

9. The balance of this paper is therefore divided into three sections: (1) dealing with actions needed to validate the generic name *Tetrahymena* and the specific names *pyriformis* and *patula*; (2) reviewing family-group names involved; and, finally, (3) summarizing our recommendations for the solution of the problems raised. All references to the " international rules " are to the International Code of Zoological Nomenclature (1961).

II. Actions Needed to Validate the Generic Name *Tetrahymena* Furgason, 1940, and the Specific Names *pyriformis* Ehrenberg, 1830, and *patula sensu* Ehrenberg, 1830

10. Species identical, or, in our opinion, definitely or probably congeneric, with *T. pyriformis* have been referred to some twenty nominal genera, which fall into three categories: very early genera without hitherto validly established types; more recent genera with types *not* congeneric with *T. pyriformis* (by the

consensus of current opinion); and more recent genera with types subjectively identical, or congeneric, with *T. pyriformis* (plus *Tetrahymena* itself). At this point the twenty genera in question are appropriately listed, arranged according to the foregoing three categories and chronologically within each category (more complete citations—*i.e.*, including pagination and information on type determination—are to be found in Table I).

(a) *Genera without validly established types*

(i) *Enchelys* (emendation—by Berthold in Latreille, 1827—of *Enchelis*) Müller, 1773;

(ii) *Trichoda* Müller, 1773;

(iii) *Leucophra* Müller, 1780—with its typographical variants (errors)[4] *Leucopera* Gmelin, 1790, *Leucophora* Goldfuss, 1820, and *Leucophrus* Ehrenberg, 1838;

(iv) *Leucophrys* Ehrenberg, 1830 (deliberate emendation, hence objective synonym, of *Leucophra*);

(v) *Acomia* Dujardin, 1841.

(b) *Genera with established types not considered congeneric with* T. pyriformis

(vi) *Colpoda* (emendation—by Gmelin, 1790—of *Kolpoda*) Müller, 1773 (type *Kolpoda cucullus* Müller, 1773);

(vii) *Glaucoma* Ehrenberg, 1830 (type *G. scintillans* Ehrenberg, 1830);

(viii) *Balantidium* Claparède and Lachmann, 1858 (type *Bursaria entozoon* Ehrenberg, 1838);

(ix) *Colpidium* Stein, 1860 (= 1860a) (type *Paramaecium kolpoda* Losana,[5] 1829 [emended to *Paramecium Colpoda*, by Ehrenberg, 1838]).

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[4] Gmelin (1790 : 3028) appears to have been the first to use the spelling "*Leucopera*", obviously through typographical error since the correct spelling "*Leucophra*" is to be found in a later section of the same work (: 3902). Ehrenberg (1838 : 31) is apparently responsible for first claiming "*Leucophrus*" Cuvier (1817) as a variant of *Leucophra*. Agassiz (1843 : 7) followed Ehrenberg in this and, in addition, attributed the spelling "*Leucopera*" to "Nemnich" (i.e. Nemnich and Gebauer, 1794 [:(presumably) column 388]). Both workers were incorrect. Cuvier (1817 : 92) used the vernacular word "Leucophres" in the sense of "the leucophrae". A careful check of all sections of the dictionary by Nemnich and his collaborators (Nemnich and Gebauer, 1793a, b, 1794, 1795; Nemnich and Böhme, 1796 [1796–98] a, [1796–98] b, 1798) has failed to reveal the spelling "*Leucopera*" either in the part ("Bd. III") to which Agassiz attributed it, or in later sections. Nemnich consistently used the spelling "*Leucophra*". Possibly Agassiz misread Nemnich and Gebauer's main entry "*Leucophra*" (1794 : column 388) as "*Leucopera*" because, following it, is to be found "*Leucopetalos*", which is obviously out of alphabetical order. (Or, perhaps these errors should all be attributed to Ehrenberg inasmuch as he is recorded as reviewer of Agassiz's cataloging (1843) of certain protozoan genera).

[5] Ehrenberg (1832c : 114 (also 1832d : 114)) described a species, *Paramecium* [sic] *kolpoda*, and attributed it to himself without reference to Losana's species, although the latter's monograph is cited in Ehrenberg, 1832. In later works (1834 : 30 [also 1835 : 174], 1837 : 164), Ehrenberg referred to this species by the same name. In his most important monograph (1838 : 352) he emended the spelling to "*Paramecium Colpoda*" and, curiously, gave "*Paramaecium* [sic] *kolpoda*" in the synonymy, although he had not used the spelling "*Paramaecium*" for the genus in any of the works actually cited in 1838, having abandoned it after his monograph of 1830 (also 1832a and 1832b). Study of Losana's and Ehrenberg's descriptions reveals that one cannot say that both authors' "*Param(a)ecium kolpoda*" represent the same species, but such appears possible. Since Ehrenberg's description clearly fits the modern "*Colpidium colpoda*", we feel it best to accept Losana's species and to regard it as having been fixed by Ehrenberg in the sense of the modern species, which could then be cited, *in extenso*, *Colpidium colpoda* (Losana, 1829, *emend.* Ehrenberg, 1838) Stein, 1860.

(c) *Genera with established types considered identical or congeneric with* T. pyriformis

(x) *Ptyxidium* Perty, 1852 (type *Enchelis ovulum* Müller, 1773);

(xi) *Saprophilus* Stokes, 1887 (*non* Streubel, 1839—Coleoptera) (type *S. agitatus* Stokes, 1887);

(xii) *Leucophrydium* Roux, 1899 (type *L. putrinum* Roux 1889);

(xiii) *Lambornella* Keilin, 1921 (type *L. stegomyiae* Keilin, 1921);

(xiv) *Paraglaucoma* Kahl, 1926 (type *P. rostrata* Kahl, 1926);

(xv) *Protobalantidium* Abé, 1927 (type *Balantidium knowlesii* Ghosh, 1925);

(xvi) *Turchiniella* Grassé and de Boissezon, 1929 (type *T. culicis* Grassé and de Boissezon, 1929);

(xvii) *Leptoglena* Grassé and de Boissezon, 1929 (type *Balantidium knowlesii* Ghosh, 1929);

(xviii) *Paraglaucoma* Warren, 1932 (type *P. limacis* Warren, 1932);

(xix) *Tetrahymena* Furgason, 1940 (type *T. geleii* Furgason, 1940 [subjective junior synonym of *Leucophrys pyriformis* Ehrenberg, 1830]);

(xx) *Sathrophilus* Corliss, 1960 (= 1960a) (type *Saprophilus agitatus* Stokes, 1887).

11. The foregoing three groups of genera are considered in the following three subsections, which are succeeded by a fourth dealing with the specific names *pyriformis* and *patula*, both of Ehrenberg (1830), and by a fifth and final subsection on *Tetrahymena* itself.

A. *Genera Without Established Types*

12. Inspection of the list under paragraph 10 (a) reveals that, whereas there are five nominal genera, these can apply, under usual application of the Code to but four taxonomic genera, for *Leucophrys* was a deliberate emendation of *Leucophra*, and the type species of one, if validly selected, is *ipso facto* type of the other (Article 69, part a).

13. The fact that four such old genera as *Enchelis* Müller, 1773, *Trichoda* Müller, 1773, *Leucophra* Müller, 1780, and *Acomia* Dujardin, 1841, have no established type species is striking testimony to the still primitive state of ciliate nomenclature. It is obvious that, if types identical, or congeneric, with *T. pyriformis* could be selected for one or more of these genera, then the earliest generic name, so restricted, would be the correct title for the genus including *T. pyriformis*. But such could not be done with either *Trichoda* or *Leucophra*; these two genera, as originally constituted, did not include species that can be recognized as identical, or congeneric, with *T. pyriformis*. Therefore, it follows that, by usual application of the Code, *Leucophrys* likewise cannot enter the picture in this connection. (*Enchelis* and *Acomia* are treated separately in paragraphs 19–21.)

14. Even though *Trichoda* and *Leucophra* cannot affect the status of *Tetrahymena*, we feel that the opportunity to make some disposition of these old generic names should not be neglected. Both constitute long-buried but still-living nomenclatural relics, which could conceivably be disinterred and reanimated, with probable subsequent necessity of their being done to death

once and for all. Study of their originally included species reveals that no useful purpose would be served by our attempting to preserve them through designating, as their types, such species as would then apply to taxonomic genera for which *Trichoda* and *Leucophra* would be the earliest available names.

15. *Trichoda* Müller, 1773, was originally established with 40[6] nominal species (Müller, 1773 : 71–96), none of them type by designation or indication; they were listed again in a later publication by Müller (1776 : 206–209). Without going into detail, we may state that, whereas none can be taken as identical, or congeneric, with *T. pyriformis*, several can be identified with reasonable certainty and have subsequently become types of other, later nominal genera.

16. *Trichoda* comes into consideration in connection with members of the *Tetrahymena*-group because: (1) Müller (1786 : 108) added a new species, *T. pirum*, which Ehrenberg (1830 : 96 [see also 1832b : 76][7]) later tentatively identified as being in part identical with his " new " species *Leucophrys pyriformis*[8] (see also paragraphs 23 and 28); and in part transferred to the genus *Kolpoda* Müller, 1773 ; (2) Ehrenberg (1830 : 96 [also 1832b : 76 and 1832d : 105]) described a species under the name *Leucophrys patula*[9] and earlier in the same work (1830 : 62 [also 1832b : 42]), gave the synonymy " *Leucophrys patula. Trich. pat. M.*" [= *Trichoda patula* Müller, 1786] and shortly thereafter (Ehrenberg, 1832c : 105 [also 1832d : 105]) " *L. patula* E. ! *Trichoda patula* Müller ", thus eliminating any possible confusion with *Trichoda patella* Müller, 1773 (: 95) (see also paragraphs 17, 40–45) ; and (3) the nominal species *Trichoda pura* Ehrenberg, 1832 (= 1832c : 104 [also 1832d : 104]) and *Trichoda carnium* Ehrenberg, 1832 (= 1832c : 104 [also 1832d : 104]) are, in our opinion, probable synonyms of the species originally described by Ehrenberg under the name *Leucophrys pyriformis*. The best solution to the problem posed by the existence of Müller's nominal genus would appear to us to be settling on an unrecognizable species as type and thus consignment of the genus to limbo as a *genus dubium*.

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[6] These species were misnumbered by Müller in two places (: 83, 85) so that, on casual checking, one may think there were only 38.

[7] The works of Ehrenberg have generally been cited in a confused way. This situation has come about by reason of two facts, briefly described as follows. First, four of his monographic studies had double publication: (a) as three separate works (1830, 1832c, 1834): and (b) as parts of four separate issues of the *Physikalische Abhandlungen* in the series *Abhandlungen der Königlichen Akademie der Wissenschaften zu Berlin* (thus 1830, pp. 1–20 = 1832a; 1830, pp. 21–108 = 1832b; 1832c = 1832d; 1834 = 1835). Of the four issues in the . . . *Abhandlungen* it should be observed that the first two and the last appeared as separate publications two and one years, respectively, ahead of the corresponding editions in the *Abhandlungen*, whereas the third appeared the same year in both editions (it is also worth noting that the separate editions for the second and fourth, as available to us, have coloured plates which, in the corresponding editions in the *Abhandlungen*, are not coloured; however, the third paper—1832d—in the . . . *Abhandlungen* edition does have coloured plates, just as its corresponding separate publication—1832c). Secondly, the *Abhandlungen* were usually issued (as, for example, those in which several of Ehrenberg's works appeared) one to three years after the years numbering the volume (the latter being designated by year rather than in numerical sequence). Thus, 1832a = **1829**; 1832b = **1830**; 1832d = **1831**; 1835 = **1833**; and 1837 = **1835**. Workers have commonly referred only to Ehrenberg's works in the *Abhandlungen*, ignoring his separate publications, and have used as dates of publication for the genera and species therein those designating the volumes of this series rather than those of actual publication, even though the latter dates are clearly given on the title page of each volume.

[8] " Das birnförmige Wimperthierchen, *Leucophrys pyriformis*, eine Art, die wahrscheinlich auch unter *Kolpoda pyrum* Müller gehört hat."

[9] " Das weite Wimperthierchen, *Leucophrys patula*."

As type of *Trichoda* Müller, 1773, we therefore select *Trichoda acarus* Müller, 1773 (: 71) an originally included species, unidentifiable in our opinion.

17. *Leucophra* Müller, 1780[10,11] (: 4), was established without designated or indicated type for three new, nominal species—*L. fluida*, *L. fluxa*, and *L. armilla*. *Leucophra* comes into consideration in connection with the *Tetrahymena*-group because to it, in its emended form (*Leucophrys* of Ehrenberg, 1830),[12] Ehrenberg (1830 : 96) added the new species *Leucophyrs pyriformis* (*T. pyriformis*) and also ostensibly transferred from *Trichoda* to *Leucophrys* the nominal species *T. patula* Müller, 1786 (see paragraphs 16, 40–45). As with *Trichoda*, we believe that we may deal best with *Leucophra* by selecting an unrecognizable species as its type—namely *L. armilla* Müller, 1780 (: 4). (This name was most probably applied by Müller inadvertently to a piece of lamellibranch gill unrecognizable as to species.) Thus, *Leucophra*, too, is consigned to limbo.

18. Under the usual application of the Code,[13] *Leucophrys* Ehrenberg, 1830, automatically follows *Leucophra*.

19. *Enchelis* and *Acomia* require separate treatment because, unlike *Trichoda* and *Leucophra*, each was originally proposed for a group of species including members that can conceivably be regarded as congeneric with *Tetrahymena pyriformis*. Thus, disposing of these nomenclatural relics has an importance here transcending that at issue with *Trichoda* and *Leucophra*, which pose no nomenclatural threat to *Tetrahymena*. With *Enchelis* and *Acomia* our aim must be to preclude any possibility of their being made applicable to the *Tetrahymena*-group.

20. *Enchelis* Müller, 1773, was originally established with 11 nominal species (Müller, 1773 : 34 ff), none of them type by designation or indication. No subsequent worker has selected a type, to the best of our knowledge. Berthold (*in* Latreille, 1827) emended the spelling of the generic name to *Enchelys*; this correction has been adopted universally. Most of Müller's species have long since been transferred from the genus. Indeed, as characterized in recent times (*e.g.*, see Kahl, 1930 : 96 ff), it represents a distinct group of gymnostome holotrichs far removed from any direct affinities with the *Tetra-*

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[10] Ehrenberg (1838 : 311) erroneously attributed *Leucophra* to Müller as of 1776; however, 1776 represents the date of a preliminary monograph entitled *Zoologiae Danicae Podromus* . . . , whereas *Leucophra* actually appeared in fasc. 2 (1780) of plates published under the title *Zoologiae Danicae* . . . *Icones*. Moreover, Ehrenberg referred to " 4 species ", but Müller actually named only three species in his 1780 publication, adding the fourth in the text *Zoologia Danica* . . . (1784 : 124), corresponding to the 1780 volumes of plates.

[11] The publications of O. F. Müller are almost as confusing as those of Ehrenberg. The part of the former worker's great historical monograph, *Zoologica Danica* . . . , in which appeared the names of interest to us here, had two editions; for the first edition, the plates (1780—under a separate title [see footnote 10]) with two pages of brief legends, appeared before the detailed text (1784), whereas, for the second edition, text and plates appeared simultaneously (1788), so far as we can determine. In each instance in which an organism was figured and named in the first edition of the plates (1780), its name should date from that publication.

[12] Ehrenberg (1830 : 96 [also 1832b : 76]) wrote as follows: " Da der Name *Leucophra* unrichtig gebildet ist, und deshalb von einigen (Goldfuss) *Leucophra* geschrieben wird, was wegen die Absicht des Gründers scheint, so habe ich für gut gehalten, obige Endung anzuwenden ".

[13] Article 67, part i.

hymena-group of hymenostomes. Its historic connection with the main problem under discussion in the present paper is through *E. ovulum* Müller, 1773, type of the genus *Ptyxidium* Perty, 1852 (see paragraph 29). To make certain that the genus *Enchelys* as recognized today is severed completely from such a connection, we hereby select, as its type, the species *Enchelis farcimen* Müller, 1773 (: 34), one of the few originally included species still currently retained in the genus.

21. *Acomia* Dujardin, 1841, was originally established with seven species (Dujardin, 1841 : 382–384), none of them type by designation or indication, and was dropped within forty years of its creation. That it should enter into a discussion of the *Tetrahymena*-group is principally due to Maupas (1883), who listed, as possibly identical with his *Glaucoma pyriformis* (*T. pyriformis*), two species of *Acomia* (*A. inflata* Dujardin, 1841; *A. ovata* Dujardin, 1841), which, although very poorly characterized, are conceivable as congeners of *T. pyriformis*. To avoid any future trouble with this ill-defined and generally forgotten genus, we select, as type, the originally included, and unidentifiable, species *Acomia vitrea* Dujardin, 1841 (: 382), an organism that we consider definitely non-congeneric with the type of the genus *Tetrahymena*.

B. *Genera with Established Types* not *Considered Congeneric with* T. pyriformis

22. Of the four genera with established types not here considered congeneric with the type of *Tetrahymena*, two—*Colpoda* Müller, 1773, and *Balantidium* Claparède and Lachmann, 1858—are trichostome genera, thus not even in the same ordinal group as *Tetrahymena*; and, the other two—*Glaucoma* Ehrenberg, 1830, and *Colpidium* Stein, 1860—although closely related to *Tetrahymena* in the hymenostome family Tetrahymenidae, are separated from *T. pyriformis* at the generic level. Therefore, all four genera can be dealt with fairly easily here. They come into the present discussion because they have been treated by various investigators as generic vehicles for nominal species that we now recognize as identical, or congeneric, with *T. pyriformis*.

23. The genus *Colpoda* Müller, 1773, *emend.* Gmelin, 1790 [= *Kolpoda* Müller, 1773] has, as its type, *Kolpoda cucullus* Müller, 1773, as selected by Taylor and Furgason, 1938[14]—trichostome species, hence clearly not congeneric with *pyriformis*. Of concern to us here, nevertheless, is the ill-defined, small hymenostome species, *Kolpoda pirum* Müller, 1786, which, as already mentioned, was considered by Ehrenberg (1830) to be, in effect, a composite species. Thus, he applied the specific name, in the form "*pyrum*", to an organism listed by him (: 96) as "*Trichoda pyrum*?"; but he also treated (: 96) Müller's "*Kolpoda pyrum*" [sic] as possibly having included his own newly created species *Leucophrys pyriformis* (see paragraph 16, footnote 8). After studying the pertinent figures in the works of Müller and Ehrenberg, we realized that *Kolpoda pirum*, *Trichoda pyrum* and *Leucophrys* [(= *Tetrahymena*)] *pyriformis* cannot be inequivocally separated. (Indeed, various 19th century compilations list these

[14] Taylor and Furgason (1938) erroneously attributed to Ehrenberg the selection of type for *Colpoda*. But they themselves are to be credited with this selection since they were the first to state that *cucullus* was the type of *Kolpoda* (*Colpoda*), so far as we have been able to determine.

names as synonyms of one another.) Our recommendations with respect to the specific name *pirum* Müller, 1786, are given in paragraph 38.

24. The genus *Balantidium*[15] Claparède and Lachmann, 1858, has as its type, *Bursaria entozoon* Ehrenberg, 1838, a species recognized today and clearly not congeneric with the type of *Tetrahymena*. Of concern to us here is the poorly described species *Balantidium knowlesii* Ghosh, 1925, for which two new nominal genera were subsequently created—*Protobalantidium* by Abé (1927) and *Leptoglena* by Grassé and de Boissezon (1929) (see paragraph 29)—and which is quite likely congeneric, possibly identical, with *T. pyriformis*. In recent years, another species of *Tetrahymena* (*T. corlissi* Thompson, 1955) was first recorded as belonging to the genus *Balantidium*[16] (e.g., by Speidel, 1951, 1953).

25. *Glaucoma* Ehrenberg, 1830, was, between the years 1883 and 1940, the most popular generic vehicle for species now assignable to the genus *Tetrahymena*. This was a consequence of an important work by Maupas (1883), in which he (1) provided a description of *pyriformis* unequivocally identifiable by modern standards and, (2) transferred Ehrenberg's *Leucophrys pyriformis* to the genus *Glaucoma*, an unfortunate decision since, as Corliss (1953a : 67) pointed out, it has been " the cause of much of the subsequent confusion in the history of ciliates in the entire C-G-L-T group ". The type species of *Tetrahymena* thus became well known as *G. pyriformis*, often written *G. piriformis*, especially by French physiologists (led by Lwoff). In view of the general state of ciliate taxonomy at the time of Maupas' work, it was, perhaps, not altogether unreasonable, although (in retrospect) most unfortunate, for him to place *T. pyriformis* in the same genus as the well established type of the genus *Glaucoma*, *G. scintillans* Ehrenberg, 1830. However, it is now recognized by modern workers that *G. pyriformis* cannot justifiably be considered congeneric with *G. scintillans*, as pointed out with precision by Furgason (1940). (*G. scintillans* has a number of valid congeners—see Corliss, 1954b.)

26. *Colpidium* Stein, 1860, has been applied as the generic name for several tetrahymenids—in particular, for a number of strains of *Tetrahymena pyriformis*. Such misuse—since *Colpidium* may be considered a valid genus in its own right—has stemmed principally from inadequate descriptions by Stokes (1885, 1886) of his species *Colpidium truncatum* Stokes, 1885, *C. striatum* Stokes, 1886, and *C. putrinum* Stokes, 1886. In our opinion (see also Corliss, 1953b), the first two of these species (also *Tillina campyla* Stokes, 1886) are valid members of the genus *Colpidium*, congeneric with the type *Paramaecium kolpoda* Losana, 1829, emended by Ehrenberg, 1838. They are not, therefore, congeneric with *T. pyriformis*. By contrast, *C. putrinum*—as pointed out by Corliss (1953a)—may be identical with the species *T. pyriformis*; but, since *pyriformis* antedates *C. putrinum*, the latter does not affect the status of the former.

[15] First recognized as belonging to the order Trichostomatida by Fauré-Fremiet (1955); erroneously considered, for many years, a member of the quite dissimilar spirotrichous order Heterotrichida. Fauré-Fremiet's allocation is today widely accepted.

[16] Unfortunately this generic name has been invoked more than once by clinical parasitologists and medical men for any small ciliate found in symbiotic existence in vertebrate tissues—presumably because *Balantidium coli* is the sole ciliate parasite of the human body. Actually, a number of species of *Tetrahymena* are now known to exist as facultative parasites in a wide variety of hosts (see Corliss, 1953a, 1954a, 1960b; Corliss, Smith, and Foulkes, 1962; Thompson, 1958).

C. Genera with Previously Established Types Here Considered Congeneric, or Identical with T. pyriformis

27. In addition to *Tetrahymena*, there are ten nominal genera in this category, of which six have somewhat or very poorly described types, and four have relatively well known types. Species in the latter category are, in our opinion, congeneric, but not identical, with *T. pyriformis*.

28. The six genera that cannot be unequivocally characterized, at least at present, are: *Ptyxidium* Perty, 1852; *Saprophilus* Stokes, 1887; *Protobalantidium* Abé, 1927; *Turchiniella* Grassé and de Boissezon, 1929; *Leptoglena* Grassé and de Boissezon, 1929; and *Sathrophilus* Corliss, 1960.

29. We think that the problem posed by four of these nominal genera (*Ptyxidium*, *Protobalantidium*, *Turchiniella*, and *Leptoglena*) is best dealt with by their unconditional suppression by the International Commission, acting under plenary powers, for purposes of the Law of Priority but not of the Law of Homonymy. *Leptoglena*, as an objective junior synonym of *Protobalantidium* (*i.e.*, with the same type species—*Balantidium knowlesii* Ghosh, 1925), is invalid in any event. *Enchelis ovulum* Müller, 1773, type of *Ptyxidium*[17] is an obscure form, but probably a tetrahymenid. *Balantidium knowlesii* Ghosh, 1925, type of *Protobalantidium* (and *Leptoglena*), and *Turchiniella culicis* Grassé and de Boissezon, 1929, type of *Turchiniella*, are seemingly synonymous with either *T. pyriformis* or *Tetrahymena chironomi* Corliss, 1960, or they represent separate tetrahymenid species (see Corliss, 1960b : 130, 131). If suppressed by the International Commission, these generic names should be placed on the appropriate Official Index and be eliminated as potential senior synonyms of *Tetrahymena*.

30. With *Saprophilus* Stokes, 1887, and *Sathrophilus* Corliss, 1960, the problem of senior synonymy does not arise. *Saprophilus* Stokes, 1887, as a junior of homonym of *Saprophilus* Streubel, 1839 (Coleoptera), cannot affect the status of *Tetrahymena*, nor is it available for its type, *S. agitatus* Stokes, 1887, which was described with certain features that allow us to regard it as an independent species, possibly belonging to a genus separate from *Tetrahymena*. Pending this species' rediscovery and redescription, its generic placement probably must remain undecided, as Holz and Corliss (1956) have already suggested. *Saprophilus* Stokes, 1887, is hereby referred to the appropriate Official Index. The generic name *Sathrophilus* has recently been proposed by Corliss (1960a) to replace *Saprophilus* of Stokes and takes the same species, *Saprophilus agitatus*, as type. Further work is needed to establish *Sathrophilus* as an independent (presumably tetrahymenid) genus or, alternatively, to sink it as a subjective junior synonym of *Tetrahymena*.

31. The four genera with types now adequately known are: *Leucophrydium* Roux, 1899; *Lambornella* Keilin, 1921; *Paraglaucoma* Kahl, 1926; and *Paraglaucoma* Warren, 1932 (*non* Kahl, 1926). Of these, the fourth is a junior homonym of the third and should be referred to the appropriate Official Index. The three nominal genera thus left pose special difficulties. Since their types are

[17] This poorly characterized genus enters our discussion here primarily because of Maupas' (1883) listing its only species as a synonym of his *Glaucoma pyriformis* [= *T. pyriformis*].

congeneric, but not identical, with *T. pyriformis*, their unconditional suppression by the International Commission in favour of *Tetrahymena* would preclude their possible use in the event that future workers were to fragment the genus, as we now conceive it. In other words, if *T. pyriformis* and one or more of the type species of the three genera now under consideration were to be separated at the generic level, the latter would be deprived of now-existing potential generic vehicles. In our opinion, a reasonable alternative would be for the International Commission, under its plenary powers, to suppress the three nominal genera *conditionally*—that is, to direct that, so long as their type species are considered congeneric with *T. pyriformis*, these generic names be suppressed in favour of *Tetrahymena*, but that they remain potentially available if, through future work, separate genera are needed for their type species (and possible congeners).

32. *Leucophrydium* has, as type, the nominal species *L. putrinum* Roux, 1899, which is a junior subjective synonym of the species long known as *Leucophrys patula* Ehrenberg, 1830. *Leucophrydium* is the earliest generic name restricted to a clearly defined species of *Tetrahymena*, as we conceive the latter genus. But great confusion would surely attend any attempt to replace the widely known name *Tetrahymena*, with an obscure one, such as *Leucophrydium*, which has never enjoyed general usage. Yet, conditionally suppressed, it would be potentially available for *Leucophrys patula* if that species were ever generically separated from *T. pyriformis*.

33. *Lambornella* Keilin, 1921, was based on the single (type) species, *L. stegomyiae* Keilin, 1921, which, as originally described, was rather more defective as regards conventional diagnostic features than *Leucophrydium putrinum*. Recently one of us (Corliss, 1960b) has been able to study material that he regards as belonging to *L. stegomyiae* and has concluded that this species is separate from, but congeneric with, *T. pyriformis*. *Lambornella*, conditionally suppressed, could likewise be removed as a threat to *Tetrahymena*, but remain potentially available if a separate genus were needed for its type.

34. *Paraglaucoma* Kahl, 1926, has as type *P. rostrata* Kahl, 1926, which, though clearly non-conspecific with *T. pyriformis*, is just as clearly, in our estimation, congeneric therewith. Other modern workers on the taxonomy of hymenostome ciliates are in full agreement with this view (*e.g.*, Holz and Thompson, 1955; Kazubski, 1958; Kozloff, 1957; Stout, 1954; Thompson, 1958). Practically no one[18] has identified any ciliate as fitting Kahl's (1926) description of *P. rostrata* between the time of its original description and its rediscovery by Corliss (1952c)—a span of 25 years; since that time it has been consistently referred to as *Tetrahymena rostrata*. Again, if conditionally suppressed, *Paraglaucoma* would be removed as a threat to *Tetrahymena* but would remain potentially available for a genus based on its type.

[18] Mugard (1949) erroneously identified one of her strains of "*Glaucoma piriformis*" as belonging to the species "*Paraglaucoma rostrata* Kahl". This mistake was acknowledged by her several years ago in a personal communication to one of us (J.O.C.).

D. *The Species* Leucophrys pyriformis *Ehrenberg*, 1830, *and* L. patula *Ehrenberg*, 1830

35. The specific names *pyriformis* and *patula* are today almost universally applied to species of *Tetrahymena* and attributed to Ehrenberg (1830). But with both there are nomenclatural problems best resolved, we feel, by formal action of the International Commission.

36. The specific name *pyriformis* Ehrenberg, 1830, by which the nominal type species of *Tetrahymena*, *T. geleii*, is now generically known, would advantageously be protected against possible subjective synonyms, of which we have already discussed *ovulum* Müller, 1773 (as published in the combination *Enchelis ovulum*—see paragraphs 20 and 30) and *pirum* Müller, 1786 (as published in the combination *Kolpoda pirum*—see paragraphs 16 and 23).

37. The nominal species *Enchelis ovulum* Müller, 1773, for which Perty (1852) created the genus *Ptyxidium* and which was later treated by Maupas (1883) as a synonym of his *Glaucoma pyriformis* [= *T. pyriformis*] is, we feel, best suppressed by the International Commission, acting under plenary powers.

38. With respect to the species *Kolpoda pirum* Müller, 1786, it is clear that, although Ehrenberg explicitly separated out *Leucophrys pyriformis* from it, the specific name *pyriformis* Ehrenberg, 1830, is not an objective junior synonym of *pirum* Müller, 1786, which is not in use today as attributed to Müller. The earlier specific name nevertheless remains as a possible *subjective* senior synonym and thus constitutes an embarrassment to the later one. This problem is again best resolved, in our view, by the suppression, under the International Commission's plenary powers, of the specific name *pirum* Müller, 1786.

39. Finally, it would be desirable for the International Commission, once again acting under plenary powers, to direct that no specific name of the many other ill-defined species described prior to *Leucophrys pyriformis* Ehrenberg, 1830, be available for the modern species *T. pyriformis*.

40. The specific name *patula*, *sensu* Ehrenberg, 1830, is beset with a problem more clearly defined than the threat of subjective senior synonymy. Nomenclaturally, *patula* of Ehrenberg descends from the specific name *patula* Müller, 1786 (as published in the combination *Trichoda patula*) which was applied to an organism that, though crudely described and illustrated in the original, can reasonably be taken to have been a spirotrichous ciliate. Ehrenberg (1830), in describing *Leucophrys patula*, considered that he was dealing with Müller's species—at least in part (see paragraph 16, footnote 9). In actual fact, he combined *two* separate species under this name, one a spirotrich (which conceivably could be the same as Müller's species) and the other a holotrich, which, from that time until recently, went by the name *Leucophrys patula*.

41. Certain subsequent workers (notably Stein, 1860b, 1867; Maupas, 1888), recognizing that Ehrenberg combined two species under the name *Leucophrys patula*, sought to solve the problem by restricting this name to the holotrichous form and segregating out the spirotrichous form in a separate genus *Climacostomum* Stein, 1859, in which the specific name *patul*(*um*) was retained. Although a not unreasonable solution to a complex and vexing

problem, this is inadmissable under the Code.[19] It is evident that under the usual application of the Code, the specific name *patula* is unavailable for the taxonomic species known today as *Tetrahymena*, or *Leucophrys*, *patula*.

42. But the facts just set forth must be reckoned in the context of general usage. A crucial point is that no one has recognized this difficulty in any previous publication. In establishing the genus *Tetrahymena*, Furgason (1940) regarded his new nominal species *T. geleii* as generically distinct from the organism generally called *Leucophrys patula*. Not recognizing the unavailability, under the Code, of *Leucophrys* for the latter species, he accepted this nominal genus, with *L. patula* as type. (So far as we can determine, this was the first actual statement that *L. patula* should be considered as type of the genus *Leucophrys*. However, many workers and compilers, before 1940—and, indeed, since that date—have listed only this species in the genus *Leucophrys*. Thus it has conventionally appeared to be a unispecific genus.) In contrast to Furgason, Corliss (1951a) concluded that *T. geleii* [= *T. pyriformis*] and *L. patula* were congeneric and, recognizing the unavailability of *Leucophrys* for these two species, transferred *L. patula* to *Tetrahymena*. At that time, he had not yet discovered that several other generic names were earlier subjective synonyms of *Tetrahymena*.

43. If *patula* were rejected on nomenclatural grounds, the next (and only other) name available for the taxonomic species in question would be *putrinum* Roux, 1899, as published in the combination *Leucophrydium putrinum*, which is, however, only subjectively synonymous with *Leucophrys patula*. But even this name is not without question. The species *Colpidium putrinum* Stokes, 1886, is probably a member of *Tetrahymena* and possibly a synonym of *T. pyriformis* (see paragraph 26). In any event, it can be seen that the name *putrinum* Roux, 1899, is potentially rejectable on the basis of secondary homonymy if Stokes' species is ever accepted as valid and, at the same time, as definitely belonging to the genus *Tetrahymena*.

44. From the foregoing discussion it is clear that *patula* can be used for the taxonomic species now generally known as *T. patula* only through action of the International Commission under its plenary powers. It is, we think, clearly in the interest of nomenclatural stability to preserve it in the sense of Ehrenberg (1830). But, if this specific name is maintained for the taxonomic species long known as *Leucophrys patula*, and recently as *T. patula*, it cannot be logically validated as from its use by Müller (1786). It may reasonably date, however, from its use by Ehrenberg (1830) with the stipulation that it is to be restricted to the holotrichous ciliate species included by him in his composite *Leucophrys patula*. Under this name the taxonomic species in question was subsequently described with considerable precision by Maupas (1888) and in less detail by certain other authors.

45. We are still left with the problem of what to do with the specific name *patula* of Müller (1786). One cannot reasonably hold that this (spirotrichous) species is identifiable as from its original description by Müller. Moreover,

[19] Article 49 clearly states, " The specific name used in an erroneous specific identification cannot be retained for the species to which the name was wrongly applied, even if the two species in question are in, or are later referred to, different genera".

even today, the nominal species to which the specific name has been, in effect, restricted—*Climacostomum patulum*—is not a definitely recognizable one. It is not the type of the genus *Climacostomum* Stein, 1860 (the status of which we do not feel qualified to pursue further in this communication). We therefore feel that the most satisfactory resolution of this unsettled condition would be for the International Commission, under its plenary powers, to suppress, for the purposes of the Law of Priority but not for those of the Law of Homonymy, the specific name *Trichoda patula* Müller, 1786, and to validate the specific name *Leucophys patula* Ehrenberg, 1830, for the species now generally known as *T. patula.*

E. The Genus Tetrahymena *Furgason,* 1940

46. To the best of our knowledge, all actions calculated to clear the way for the validation of the generic name *Tetrahymena* Furgason, 1940, have now been summarized. We strongly urge that this be done by the International Commission, under its plenary powers, and that *Tetrahymena* be placed on the Official List of Generic Names in Zoology. To realize the first of these ends, it would, perhaps, be sufficient for the International Commission simply to direct, without specific reference, that no earlier generic name shall be substituted for *Tetrahymena.* However, we think greater service is done through the specific enumeration, as has been done by us here, of the nomenclatural and taxonomic problems currently facing workers on the family Tetrahymenidae and through specific action by the International Commission on the basis of present knowledge in the several cases already surveyed.

47. At the same time as *Tetrahymena* is placed on the appropriate Official List, the invalid emendations *Tetrahymen* Mast and Pace, 1946, and *Tetrahymenia* Mugard, 1949,[20] surely inadvertent in the second case, should be placed on the Official Index of Rejected and Invalid Generic Names in Zoology. It is true, as Mast and Pace (1946) pointed out, that *Tetrahymena* (from τετρα, combining form for *four*; *a skin, membrane*) is orthographically defective; but this does not permit its correction under the Code.[21]

III. Family-group Names Based on Genera Directly Involved with the *Tetrahymena*-group

48. Family-group names have been based on five of the genera here considered. These names are: Balantidiidae Reichenow *in* Doflein and Reichenow, 1929; Colpodidae Ehrenberg, 1838; Enchelyidae Ehrenberg, 1838; Leucophryidae Mugard, 1949 (: 171—erroneously attributed by Mugard to Kahl—also given as " Leucophrydae " by Mugard, p. 181); and, most recently, Tetrahymenidae Corliss, 1952.

49. It should, in addition, be mentioned that a family Leucophryens was proposed by Dujardin, 1841, but this is best disregarded because (1) it was a vernacular name, and (2) it was never adopted by subsequent workers as dating from Dujardin's usage.

[20] Generally cited, incorrectly, as 1948. This doctoral thesis (Université de Paris) actually was published in the spring of 1949.

[21] Article 32, c.

50. Under the rules adopted for family names at Copenhagen (International Commission on Zoological Nomenclature, 1953), Leucophryidae (emendation of Leucophrydae) could be used for the taxonomic family including the genus *Tetrahymena*.

51. However, in our opinion, it is undesirable to preserve the name Leucophryidae in place of Tetrahymenidae. The earlier family name has had almost no use. We therefore recommend that Leucophryidae Mugard, 1949, be suppressed in favour of Tetrahymenidae Corliss, 1952, and that the latter name be placed on the Official List of Family-Group Names in Zoology and the former name on the corresponding Official Index of Rejected and Invalid Family-Group Names in Zoology (along with Leucophryens Dujardin, 1841, and Leucophrydae Mugard, 1949).

IV. Recommendations[22] for the Solution of the Problems Raised Regarding the Generic Name *Tetrahymena* and the Specific Names *Tetrahymena pyriformis* and *T. patula*

52. Based on the data cited here, we, the authors, request the International Commission on Zoological Nomenclature:

(1) to use its plenary powers:

(a) to suppress the following names for the purposes of the Law of Priority but not for those of the Law of Homonymy:

(i) *Leptoglena* Grassé & de Boissezon, 1929;

(ii) *Protobalantidium* Abé, 1927;

(iii) *Ptyxidium* Perty, 1852;

(iv) *Turchiniella* Grassé & de Boissezon, 1929;

(v) *ovulum* Müller, 1773, as published in the binomen *Enchelis ovulum*;

(vi) *patula* Müller, 1786, as published in the binomen *Trichoda patula*;

(vii) *pirum* Müller, 1786, as published in the binomen *Kolpoda pirum*;

(viii) *pyrum* Ehrenberg, 1830, as published in the binomen *Trichoda pyrum*;

(ix) Leucophryidae Mugard, 1949;

(b) to Rule that the generic name *Tetrahymena* Fergason, 1940, is to be given priority over the generic names *Lambornella* Keilin, 1921, *Leucophrydium* Roux, 1899, and *Paraglaucoma* Kahl, 1926, by any zoologist who considers the type-species of these genera to belong to the same genus-group taxon;

(c) to validate the emendation to *Enchelys* of the generic name *Enchelis* Müller, 1773;

(d) to validate the emendation to *Colpoda* of the generic name *Kolpoda*, Müller, 1773;

[22] See also the appropriate columns in Tables I and II, tables which concisely summarize the nomenclatural data on the nominal genera and species involved—some 64 in all.

(e) to validate the specific name *patula* Ehrenberg, 1830, as published in the binomen *Leucophrys patula*, in spite of the fact that Ehrenberg had no intention of publishing a new specific name;

(f) to validate the emendation to *colpoda* of the specific name *kolpoda* (*Paramaecium*) Losana, 1829;

(g) to Rule that the specific name *Leucophrys pyriformis* Ehrenberg, 1830, is to be given precedence over any earlier name published for the same species-group taxon;

(2) to place the following generic names on the Official List of Generic Names in Zoology:

(a) *Balantidium* Claparède & Lachmann, 1858 (gender: neuter), type species, by monotypy, *Bursaria entozoon* Ehrenberg, 1838;

(b) *Colpidium* Stein, 1860 (gender: neuter), type-species, by monotypy, *Paramecium colpoda* Losana, 1829;

(c) *Colpoda* Müller, 1773 (gender: feminine), type-species, by designation by Taylor & Furgason, 1938, *Kolpoda cucullus* Müller, 1773;

(d) *Enchelys* Müller, 1773 (gender: feminine), type-species, by designation herein, *Enchelis farcimen* Müller, 1773;

(e) *Glaucoma* Ehrenberg, 1830 (gender: feminine), type-species, by monotypy, *Glaucoma scintillans* Ehrenberg, 1830;

(f) *Tetrahymena* Furgason, 1940 (gender: feminine), type-species, by original designation, *Tetrahymena geleii* Furgason, 1940;

(3) to place the following specific names on the Official List of Specific Names in Zoology:

(a) *entozoon* Ehrenberg, 1838, as published in the binomen *Bursaria entozoon* (type-species of *Balantidium* Claparède & Lachmann, 1858);

(b) *colpoda* Losana, 1829, as published in the binomen *Paramecium colpoda* (type-species of *Colpidium* Stein, 1860);

(c) *cucullus* Müller, 1773, as published in the binomen *Kolpoda cucullus* (type-species of *Colpoda* Müller, 1773);

(d) *farcimen* Müller, 1773, as published in the binomen *Enchelis farcimen* (type-species of *Enchelys* Müller, 1773);

(e) *scintillans* Ehrenberg, 1830, as published in the binomen *Glaucoma scintillans* (type-species of *Glaucoma* Ehrenberg, 1830);

(f) *pyriformis* Ehrenberg, 1830, as published in the binomen *Leucophrys pyriformis*;

(g) *patula* Ehrenberg, 1830, as published in the binomen *Leucophrys patula*;

(4) to place the family-group name TETRAHYMENIDAE Corliss, 1952 (type-genus *Tetrahymena* Furgason, 1940) on the Official List of Family-Group Names in Zoology;

(5) to place the following generic names on the Official Index of Rejected and Invalid Generic Names in Zoology:

(a) *Enchelis* Müller, 1773 (Ruled under the plenary powers in (1) (c) above to be an incorrect original spelling for *Enchelys*);
(b) *Kolpoda* Müller, 1773 (Ruled under the plenary powers in (1) (d) above to be an incorrect original spelling for *Colpoda*);
(c) *Leptoglena* Grassé & de Boissezon, 1929 (as suppressed under the plenary powers in (1) (a) above);
(d) *Leucopera* Gmelin, 1790 (an incorrect spelling for *Leucophra* Müller, 1780);
(e) *Leucophrus* Ehrenberg, 1838 (an incorrect spelling for *Leucophra* Müller, 1780);
(f) *Leucophrys* Ehrenberg, 1830 (an unjustified emendation of *Leucophra* Müller, 1780);
(g) *Paraglaucoma* Warren, 1932 (a junior homonym of *Paraglaucoma* Kahl, 1926);
(h) *Protobalantidium* Abé, 1927 (as suppressed under the plenary powers in (1) (a) above);
(i) *Ptyxidium* Perty, 1852 (as suppressed under the plenary powers in (1) (a) above);
(j) *Saprophilus* Stokes, 1887 (a junior homonym of *Saprophilus* Streubel, 1839);
(k) *Tetrahymen* Mast & Pace, 1946 (an unjustified emendation of *Tetrahymena* Furgason, 1940);
(l) *Tetrahymenia* Mugard, 1949 (an incorrect spelling for *Tetrahymena* Furgason, 1940).;
(m) *Turchiniella* Grassé & de Boissezon, 1929 (as suppressed under the plenary powers in (1) (a) above);

(6) to place the following specific names on the Official Index of Rejected and Invalid Specific Names in Zoology;
(a) *kolpoda* Losana, 1829, as published in the binomen *Paramaecium kolpoda* (Ruled under the plenary powers in (1) (f) above to be an incorrect original spelling for *colpoda*);
(b) *ovulum* Müller, 1773, as published in the binomen *Enchelis ovulum* (as suppressed under the plenary powers in (1) (a) above);
(c) *patula* Müller, 1786, as published in the binomen *Trichoda patula* (as suppressed under the plenary powers in (1) (a) above);
(d) *piriformis* of the literature (an incorrect spelling of "*pyriformis*" which has caused considerable, though unnecessary, confusion);
(e) *pirum* Müller, 1786, as published in the binomen *Kolpoda pirum* (as suppressed under the plenary powers in (1) (a) above);
(f) *pyrum* Ehrenberg, 1830, as published in the binomen *Trichoda pyrum* (as suppressed under the plenary powers in (1) (a) above);

(7) to place the following family-group names on the Official Index of Rejected and Invalid Family-Group Names in Zoology:
(a) LEUCOPHRYIDAE Mugard, 1949 (type-genus *Leucophrys* Ehrenberg, 1830) (as suppressed under the plenary powers in (1) (a) above);
(b) LEUCOPHRYENS Dujardin, 1841 (type-genus *Leucophrys* Ehrenberg, 1830) (a vernacular name);

(c) LEUCOPHRYDAE Mugard, 1949 (type-genus *Leucophrys* Ehrenberg, 1830) (an incorrect original spelling for LEUCOPHRYIDAE).

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TABLE I. Nominal Genera Having Direct Bearing on Nomenclatural Status of *Tetrahymena*

	Establishment of Type		Status as Possible Subjective Synonym of *Tetrahymena*			Status or Disposition	
	Species	How determined	None	Possible or Probable	Definite	As Recognized or Recommended Here	Action Needed by International Commission
1. *Acomia* Dujardin, 1841 (: 382)	*A. vitrea* Dujardin, 1841 (: 382)	By selection (present paper)	+			Restricted to *A. vitrea* (not a tetrahymenid)	None
2. *Balantidium* Claparède and Lachmann, 1858 (: 247)	*Bursaria entozoon* Ehrenberg, 1838 (: 327)	By indication (monotypy)	+			A trichostome genus	Addition to "Official List of Generic Names . . ."
3. *Colpidium* Stein, 1860 (=Stein, 1860a [: 47])	*Paramecium colpoda* Losana, 1829 (: 45) (emend. pro *Paramaecium kolpoda*)	By indication (monotypy)	+			A tetrahymenid genus, separate from *Tetrahymena* (see next column)	Addition to "Official List of Generic Names . . ."
4. *Colpoda* Müller, 1773 emend. Gmelin 1790 (: 3894) (pro *Kolpoda* Müller, 1773 [: 56])	*Kolpoda cucullus* Müller 1773 (: 58)	By selection (Taylor and Furgason, 1938 [: 321])	+			A trichostome genus	Addition to "Official List of Generic Names . . ."
5. *Enchelis* Müller, 1773 (: 34) (vide *Enchelys*)						(see next column)	Suppression, under plenary powers, of this spelling for purposes or Priority, but not Homonymy. Addition to "Official Index of Rejected and Invalid Generic Names . . ."

TABLE I. Nominal Genera Having Direct Bearing on Nomenclatural Status of *Tetrahymena*

	Establishment of Type		Status as Possible Subjective Synonym of *Tetrahymena*			Status or Disposition	
	Species	How determined	None	Possible or Probable	Definite	As Recognized or Recommended Here	Action Needed by International Commission
6. *Enchelys* Müller, 1773, emend. Berthold in Latreille (pro. *Enchelis* Müller, 1773 [: 34]	*Enchelis farcimen* Müller, 1773 (: 34)	By selection (present paper)	+			A gymnostome genus —as restricted here	Addition to " Official List of Generic Names . . ."
7. *Glaucoma* Ehrenberg 1830 (: 98)	*G. scintillans* Ehrenberg 1830 (: 98)	By indication (monotypy)	+			A tetrahymenid genus, separate from *Tetrahymena* (see next column)	Addition to " Official List of Generic Names . . ."
8. *Kolpoda* Müller, 1773 (: 56) (vide *Colpoda*)						(See next column)	Suppression, under plenary powers, of this spelling for purposes of Priority, but not Homonymy: addition to " Official Index . . ."
9. *Lambornella* Keilin, 1921 (: 217)	*L. stegomyiae* Keilin 1921 (: 217)	By indication (monotypy)			+	A tetrahymenid genus, synonymous with *Tetrahymena* (see next column)	Conditional suppression under plenary powers as replacement for *Tetrahymena;* available for separate taxonomic genus, if needed

10. *Leptoglena* Grassé and de Boissezon 1929 (: 187)	*Balantidium knowlesii* Ghosh 1925 (: 187)	By indication (monotypy)		+	An ill-defined nominal tetrahymenid genus (see next column)	Suppression, under plenary powers, for purposes of Priority, but not Homonymy; addition to " Official Index . . ."
11. *Leucopera* Gmelin, 1790 (: 3028) (err. pro *Leucophra* q.v.)					(See next column)	Addition to " Official Index . . ."
12. *Leucophora* Goldfuss 1820 (: 67) (err. pro *Leucophra*, q.v.)					(See next column)	As above
13. *Leucophra* Müller, 1780 (: 4)	*L. armilla* Müller 1780 (: 4)	By selection (present paper)	+		Restricted to *L. armilla* (not a tetrahymenid—probably a piece of lamellibranch gill!) hence a *genus dubium*	None
14. *Leucophrus* Ehrenberg 1838 (: 311) (err. pro *Leucophra*, q.v.)					(See next column)	Addition to " Official Index of Rejected and Invalid Generic Names . . ."
15. *Leucophrydium* Roux 1899 (: 589)	*L. putrinum* Roux 1899 (: 589)	By indication (monotypy)		+	A tetrahymenid genus, synonymous with *Tetrahymena* (see next column)	Conditional suppression under plenary powers as replacement name for *Tetrahymena*—available for separate taxonomic genus, if needed
16. *Leucophrys* Ehrenberg, 1830 (: 96) (emend. pro *Leucophra*, q.v.)					(See next column)	Addition to " Official Index of Rejected and Invalid Generic Names . . ."

TABLE I. Nominal Genera Having Direct Bearing on Nomenclatural Status of *Tetrahymena*

	Establishment of Type		Status as Possible Subjective Synonym of *Tetrahymena*			Status or Disposition	
	Species	How determined	None	Possible or Probable	Definite	As Recognized or Recommended Here	Action Needed by International Commission
17. *Paraglaucoma* Kahl, 1926 (: [199], 351)	*P. rostrata* Kahl, 1926 (: 351)	By indication (monotypy)			+	A tetrahymenid genus synonymous with *Tetrahymena* (see next column)	Conditional suppression, under plenary powers, as replacement name for *Tetrahymena*—available for separate taxonomic genus, if needed
18. *Paraglaucoma* Warren, 1932 (: 11) (*non* Kahl, 1926)	*P. limacis* Warren, 1932 (: 11)	By indication (monotypy)			+	Junior homonym of *Paraglaucoma* Kahl, 1926 (see next column)	Addition to "Official Index of Rejected and Invalid Generic Names . . ."
19. *Protobalantidium* Abé, 1927 (: 9)	*Balantidium knowlesii* Ghosh, 1925 (: 189)	By indication (monotypy)		+		An ill-defined, nominal tetrahymenid genus (see next column)	Suppression, under plenary powers, for purposes of Priority, but not Homonymy; addition to "Official Index . . ."
20. *Ptyxidium* Perty, 1852 (: 148)	*Enchelis ovulum* Müller, 1773 (: 36)	By indication (monotypy)		+		An ill-defined, nominal tetrahymenid genus (see next column)	Suppression, under plenary powers, for purposes of Priority, but not Homonymy; addition to "Official Index . . ."

21. *Saprophilus* Stokes, 1887 (: 247) (*non* Streubel, 1839 [: col] 136)	*S. agitatus* Stokes, 1887 (: 247)	By indication (monotypy)		+	Junior homonym of *Saprophilus* Streubel, 1839 (Coleoptera) (see next column)	Addition to "Official Index . . ."
22. *Sathrophilus* Corliss, 1960 (=1960a : 276)	*Saprophilus agitatus* Stokes, 1887 (: 247)	By designation (Corliss, 1960 [=1960a : 276])		+	An ill-defined, nominal tetrahymenid genus, possibly a junior synonym of *Tetrahymena*	None
23. *Tetrahymen* Mast and Pace, 1946 (: 232) (emend, pro *Tetrahymena* q.v.)					(See next column)	Addition to "Official Index . . ."
24. *Tetrahymena* Furgason 1940 (: 258)	*T. geleii* Furgason 1940 (: 258)	By designation		+	Type genus of family Tetrahymenidae Corliss, 1952 (=1952d : 4)—subjective junior synonym of several nominal genera (see next column)	Validation, under plenary powers, against all subjective senior synonyms; addition to "Official List of Generic Names . . ."
25. *Tetrahymenia* Mugard, 1949 (: 182) (err. pro *Tetrahymena*, q.v.)					(See next column)	Addition to "Official Index . . ."
26. *Trichoda* Müller, 1773 (: 71)	*T. acarus* Müller, 1773 (: 71)	By selection (present paper)	+		Restricted to *T. acarus* (an unrecognizable species—hence a *genus dubium*)	None
27. *Turchiniella* Grassé and de Boissezon, 1929 (: 187)	*T. culicis* Grassé and de Boissezon 1929 (: 187)	By indication (monotypy)		+	An ill-defined nominal tetrahymenid genus, (see next column)	Suppression, under plenary powers for purposes of Priority, but not Homonymy; addition to "Official Index . . ."

TABLE II. Specific Names with Direct Bearing on Nomenclatural Status of Species of *Tetrahymena*

	Original Combination	Recognized Today*	Modern Name	Action Needed, With Respect to Original Name, by International Commission
1. *acarus* Müller, 1773 (: 71)	*Trichoda acarus*	—		None
2. *agitatus* Stokes, 1887 (: 247)	*Saprophilus agitatus*	?	*Sathrophilus agitatus* (Stokes, 1887) Corliss, 1960 (=1960a : 8)	None
3. *armilla* Müller, 1780	*Leucophra armilla*	—		None
4. *campyla* Stokes 1886 (: 101)	*Tillina campyla*	+	*Colpidium campylum* (Stokes, 1886) Bresslau, 1922 (: 22)	None
5. *carnium* Ehrenberg, 1832 (: 104)	*Trichoda carnium*	?s	? *Tetrahymena pyriformis* (Ehrenberg, 1830 [: 96]) Lwoff, 1947 (: 103)	None
6. *chironomi* Corliss, 1960 (=1960b : 115)	*Tetrahymena chironomi*	+	*Tetrahymena chironomi* Corliss, 1960	None
7. *colpoda* Losana, 1829, emend, Ehrenberg, 1838 (: 114) [=*kolpoda* Losana, 1829 (: 45)]	*Paramaecium kolpoda*	+	*Colpidium colpoda* (Losana, 1829, emend. Ehrenberg, 1838) Stein, 1860 (=1860a : 47)	Addition to " Official List of Specific Names . . ."
8. *corlissi* Thompson, 1955 (: 12)	*Tetrahymena corlissi*	+	*Tetrahymena corlissi* Thompson, 1955 (: 12)	None
9. *culicis* Grassé and de Boissezon, 1929 (: 187)	*Turchiniella culicis*	?s	?*Tetrahymena chironomi*, *T. pyriformis*	None

10. *cucullus* Müller, 1773 (: 58)	*Kolpoda cucullus*	+	*Colpoda cucullus* Müller, 1773	Addition to " Official List of Specific Names . . ."
11. *entozoon* Ehrenberg, 1838 (: 327)	*Bursaria entozoon*	+	*Balantidium entozoon* (Ehrenberg, 1838)	Addition to " Official List of Specific Names . . ."
12. *farcimen* Müller, 1773 (: 34)	*Enchelis farcimen*	+	*Enchelys farcimen*	Addition to " Official List of Specific Names . . ."
13. *fluida* Müller, 1780 (: 4)	*Leucophra fluida*	—		None
14. *fluxa* Müller, 1780 (: 4)	*Leucophra fluxa*	—		None
15. *geleii* Furgason, 1940 (: 258)	*Tetrahymena geleii*	s	*T. pyriformis*	None
16. *inflata* Dujardin, 1841 (: 383)	*Acomia inflata*	?s	?*T. pyriformis*	None
17. *knowlesii* Ghosh, 1925 (: 189)	*Balantidium knowlesii*	?s	?*T. pyriformis*	None
18. *kolpoda* Losana, 1829 (: 45) (vide *colpoda*)	*Paramaecium kolpoda*			Addition, in this spelling, to " Official Index of Invalid and Rejected Specific Names . . ."
19. *limacis* Warren, 1932 (: 11)	*Paraglaucoma limacis*	+	*Tetrahymena limacis* (Warren, 1932) Kozloff, 1946 (: 449)	None
20. *ovata* Dujardin, 1841 (: 383)	*Acomia ovata*	?s	? *T. pyriformis*	None
21. *ovulum* Müller, 1773 (: 36)	*Enchelis ovulum*	?	? *T. pyriformis*	Suppression, under Plenary Powers, for purposes of Priority but not Homonymy; addition to " Official Index ....".

TABLE II. Specific Names with Direct Bearing on Nomenclatural Status of Species of *Tetrahymena*

	Original Combination	Recognized Today*	Modern Name	Action Needed, With Respect to Original Name, by International Commission
22. *patella* Müller, 1773 (: 95)	*Trichoda patella*	—		None
23. *patula* Müller, 1786 (: 181)	*Trichoda patula*	?	? *Climacostomum patulum* (Müller, 1786) Stein, 1860 (=1860b : 60)	Suppression, under Plenary Powers for purposes of Priority but not Homonymy; addition to "Official Index . . ."
24. *patula* Ehrenberg, 1830 (: 95)	*Leucophrys patula*	+	*Tetrahymena patula* (Ehrenberg, 1830) Corliss, 1951 (=1951b : 11)	Validation, under Plenary Powers; addition to the "Official List of Specific Names"
25. *piriformis* of the literature	*Glaucoma piriformis*	s	*T. pyriformis*	Addition to "Official Index . . ."
26. *pirum* Müller, 1786 (: 108)	*Kolpoda pirum*	?	? *T. pyriformis*	Suppression, under Plenary Powers, for purposes of Priority but not Homonymy; addition to "Official Index . . ."
27. *pura* Ehrenberg, 1832 (: 104)	*Trichoda pura*	?s	*T. pyriformis*	None
28. *putrinum* Stokes, 1886 (: 103)	*Colpidium putrinum*	?s	? *T. pyriformis*	None
29. *putrinum* Roux, 1899 (: 589)	*Leucophrydium putrinum*	s	*T. patula*	None
30. *pyriformis* Ehrenberg, 1830	*Leucophrys pyriformis*	+	*Tetrahymena pyriformis* (Ehrenberg, 1830) Lwoff, 1947	Validation, under Plenary Powers; addition to "Official List . . ."

31. *pyrum* Ehrenberg, 1830 (: 96)	*Trichoda pyrum*	?	? *T. pyriformis*	Suppression, under Plenary Powers, for purposes of Priority but not Homonymy; addition to "Official Index . . ."
32. *rostrata* Kahl, 1926 (: 351)	*Paraglaucoma rostrata*	+	*Tetrahymena rostrata* (Kahl, 1926) Corliss, 1952 (=1952c : 3)	None
33. *scintillans* Ehrenberg, 1830 (: 98)	*Glaucoma scintillans*	+	*Glaucoma scintillans* Ehrenberg, 1830	Addition to " Official List of Specific Names . . ."
34. *stegomyiae* Keilin, 1921 (: 217)	*Lambornella stegomyiae*	+	*Tetrahymena stegomyiae* (Keilin, 1921) Corliss, 1960 (=1960b :125)	None
35. *striatum* Stokes, 1886 (: 103)	*Colpidium striatum*	+	*Colpidium striatum* Stokes, 1886	None
36. *truncatum* Stokes, 1885 (: 442)	*Colpidium truncatum*	+	*Colpidium truncatum* Stokes, 1885	None
37. *vitrea* Dujardin, 1841 (: 382)	*Acomia vitrea*	—		None

*+ = recognized species; — = unidentifiable species; ? = species of uncertain status; s = junior synonym; ?s = probable junior synonym.

THE HOMONYMY OF *PAPILIO AGLAJA* LINNAEUS 1758 (INSECTA, LEPIDOPTERA, PIERIDAE & NYMPHALIDAE): REQUEST FOR VALIDATION. Z.N.(S.) 1791

By C. F. Cowan (*Little Gaddesden House, Berkhamsted, Herts., England*)

The use of the name *Papilio aglaja* Linnaeus 1758 has been the subject of repeated revision for 200 years and the situation is still most unsatisfactory. This application is submitted in the hope that it may be finally resolved. The history of the case is briefly as follows:

2. Linnaeus, in *Systema Naturae* edition 10 (1758) gave the name *aglaja* to two entirely different species in the genus *Papilio*, No. 44 (p. 465) and No. 140 (p. 481), thus publishing homonyms. *Papilio aglaja* No. 44 is an oriental Pierid now placed in the genus *Delias* Hübner, and the junior primary homonym No. 140 is a Palaearctic Nymphalid. Both are well known in their respective regions.

3. In edition 12 (1767) Linnaeus tried to rectify his error. In this edition the numbers became respectively No. 53 (p. 755) and No. 211 (p. 785). Unfortunately he gave a new name (*pasithoe*) to No. 53, the senior, instead of to the junior primary homonym, an action he was not entitled to take under any version of the International Code as it stood until 1960[1].

4. Because early authors often used 1767 as the starting date for nomenclature, we often find (e.g. Godart 1819, *Encyc. Méthod.* **9** : 148, 264) *Pieris pasithoe* and *Argynnis aglaja* in use, with no mention of *Pieris aglaja* in the exhaustive synonymy. But it soon became accepted that 1758 should be the universal starting date. Synonymies were reviewed and *Pieris* (*Delias*) *aglaja* Linnaeus 1758, No. 44 has now been in universal use in all works on oriental insects certainly since 1900 (e.g. for India *sens. lat.*, Moore 1904, Bingham 1907, Evans 1923, –27, –32, Talbot 1939; for Borneo, Moulton 1914; for Malaya, Corbet & Pendlebury 1932, –56; and for Formosa, Shirôzu 1960; also Fruhstorfer 1910 in Seitz *Grschm. Erde* **9** : 133, and Talbot in his classic monograph on the genus *Delias* (1928–37)).

5. For the Nymphalid *aglaja*, however, usage died hard. The problem was recognised certainly by 1935 when Verity (*Entomologist* **68** : 189 f.n.) grasped the nettle and said that unless and until the International Commission ruled otherwise, *Argynnis* (*Mesoacidalia*) *aglaja* would have to be replaced as a junior primary homonym by *charlotta* Haworth 1803. Soon afterwards Hemming 1942 (*Proc. R. ent. Soc.* (B) **11** : 155 sqq.) discussed the case in detail with the same conclusive result. It is relevant to quote his paragraph 6 here in full.

[1] The rule that line and page precedence determined which of names published simultaneously had priority was in force for only five years—between 1948 (Paris Congress) and 1953 (Copenhagen Congress). The Code made no ruling before 1948 as to the relative priority to be accorded to homonyms published simultaneously, but always ruled (except as noted above) that the relative priority of synonyms published simultaneously shall be determined by the first reviser. (W. E. China).

" 6. The only remaining way by which an attempt might be made to retain the name *aglaja* Linnaeus for the Nymphalid species would be to invite the International Commission for Zoological Nomenclature to render an Opinion, under ' Suspension of the Rules ', declaring that this name should be so retained, nothwithstanding the fact that it is a homonym. It is important to realise that, although the International Commission have been vested with ' plenary powers ' to suspend the rules, those ' plenary powers ' were given to the Commission by the International Zoological Congress subject to the condition that they are only to be used in cases where in the judgment of the Commission ' the strict application of the rules will clearly result in greater confusion than uniformity '. The strict application of the rules in the present case would certainly cause inconvenience through the suppression of a well-known name, but causing inconvenience is a very different thing from causing ' greater confusion than uniformity ' and it would be very difficult to establish a case to show that the latter would arise if the rules were strictly applied and the name *Papilio aglaja* Linnaeus for the Nymphalid species were sunk as a homonym. Moreover, it should be observed that the International Commission have never yet used their ' plenary powers ' to validate a homonym, and in view of the express terms of Articles 35 and 36 of the Code and of the importance attached by the Commission to the principle embodied in those Articles an application that involved the suspension of the rules in this manner would need to be extremely strong before the International Commission would be likely to give a favourable response. For these reasons it is most improbable that any application to the International Commission for an Opinion so as to retain the name *Papilio aglaja* for the Nymphalid species would be successful. At the present time this is a purely academic question since no such application has been made to the Commission. As things stand today the above name is an invalid homonym and as such must be rejected." Thus Hemming explained why he did not fight to preserve the name for the Nymphalid.

7. But his arguments surely emphasise that there is an extremely strong case now. Through a change in the Code in 1961 the situation has been completely reversed. Article 24(a) now permits a " First Reviser " to make exactly such a change as Linnaeus tried to make in 1767. There is no time-bar to this Article as there is in certain others, so it has retrospective effect. So now it is the Pierid *Papilio* (*Delias*) *aglaja* Linnaeus 1758 whose well established and widely used name unquestionably needs protection. Whether this be with the simultaneous preservation of, or at the expense of, the Nymphalid name is debatable. In compliance with the former rules a number of authors, e.g. Verity 1950 (*Le Farfalle diurne d'Italia* **4** : 298), Lempke 1956 (*Catalogus der Nederlandse Macrolepidoptera.*, Suppl. 4—*Tijd. Ent.* **99** : 173), Bretherton 1966 (*Distribution List of Butterflies of W. & S. Europe.—Trans. Soc. Brit. Ent.* **17**(1) : 29) have discarded it for *Mesoacidalia charlotta* Haworth. Others have not. Now Higgins 1967 (*Entomologist* **100** : 20) has pointed out the change in the Rules as it affects the Palaearctic Nymphalid, invalidating Hemming *et al.*, and legalising the laggards.

8. Surely it is most necessary and urgent, in the interests not only of uniformity but also of the repute of the Rules themselves, first to preserve

Papilio aglaja Linnaeus 1758 No. 44 in its current and long-established usage for the Pierid species, and second to take the necessary consequential action regarding the Nymphalid species.

9. Probably the most universally acceptable course will be, by suspending the law of homonymy for this particular and special case, to preserve the name for both species as from 1758. This could not possibly result in any confusion; the two homonyms have been not only in separate genera but also in different families ever since *Papilio* was subdivided. Moreover their geographical ranges nowhere overlap. This action would also obviate the undoubted difficulty that *charlotta* was described by Haworth, for both sexes, as a British species quite separate from the British representatives of the Nymphalid *aglaja*, of which it is in fact a most distinctive and scarce aberration. If this course is adopted, Linnaeus' 1767 revision will be irrelevant, merely making *pasithoe* a junior synonym for the Pierid *aglaja* as it has always been regarded till now. Such action would penalise the law-abiding authors like Verity and Lempke, but they, and more so Bretherton, are already outdated by the 1961 Code. My request below is for the adoption of this course.

10. The Commission may however consider that *aglaja* for the Nymphalid species was properly rejected by Hemming in 1942 and should remain so rejected despite contradiction by the new first reviser rule. In this event again, Linnaeus' 1767 revision would be irrelevant; and *Papilio aglaja* Linnaeus 1758, *Systema Naturae*, edn. 10, No. 44 (p. 465) would qualify for the Official List of Specific Names, and *Papilio aglaja* Linnaeus 1758, *Systema Naturae* edn. 10, No. 140 (p. 481) for the Official List of Rejected Specific Names.

11. Should however the Commission decide that no action is possible under their plenary powers, then under the current Code Linnaeus' action as first reviser must be accepted; the Pierid must be known as *Papilio* (*Delias*) *pasithoe* Linnaeus 1767, *Systema Naturae* edn. 12, No. 53 (p. 755), and the Nymphalid as *Papilio* (*Mesoacidalia*) *aglaja* Linnaeus 1758, *Systema Naturae* edn. 10, No. 140 (p. 481), both of which names would qualify for the Official List of Specific Names; and *Papilio aglaja* Linnaeus 1758, *Systema Naturae* edn. 10, No. 44 (p. 465) for the Official List of Rejected Specific Names.

12. In either case it is considered most desirable that the appropriate names should be placed respectively on the Official Lists, to make it quite clear to authors which names should, and which should not, be employed from now on.

13. The International Commission on Zoological Nomenclature is requested, for the reasons summarised in paragraph 9 above, to take the following action:

(1) to use its plenary powers to suspend Article 53 (Law of Homonymy) of the International Code of Zoological Nomenclature for the particular and special case of *Papilio aglaja* Linnaeus 1758, *Systema Naturae* edn. 10, No. 44 (p. 465) and *Papilio aglaja* Linnaeus 1758, *Systema Naturae* edn. 10, No. 140 (p. 481);

(2) to place on the Official List of Specific Names in Zoology the specific name *aglaja* Linnaeus 1758 (LEPIDOPTERA, PIERIDAE), as published in the binomen *Papilio aglaja* Linnaeus 1758, *Systema Naturae* edn. 10, No. 44 (p. 465);

(3) to place on the Official List of Specific Names in Zoology the specific name *aglaja* Linnaeus 1758 (LEPIDOPTERA, NYMPHALIDAE), as published in the binomen *Papilio aglaja* Linnaeus 1758, *Systema Naturae* edn. 10, No. 140 (p. 481);

(4) to place the specific name *pasithoe* Linnaeus, 1767, as published in the binomen *Papilio pasithoe* (a junior objective synonym of *Papilio aglaja* Linnaeus, 1758) on the Official Index of Rejected and Invalid Specific Names in Zoology.

GALEOPITHECUS PALLAS, 1783 (MAMMALIA): PROPOSED VALIDATION UNDER THE PLENARY POWERS. Z.N.(S.) 1792

By Leigh Van Valen (*Department of Anatomy, University of Chicago, U.S.A.*) Percy M. Butler (*Department of Zoology, Royal Holloway College, Englefield Green, Surrey, England*), Malcolm C. McKenna, Frederick S. Szalay (*Department of Vertebrate Paleontology, American Museum of Natural History, New York, U.S.A.*), Bryan Patterson and Alfred S. Romer (*Museum of Comparative Zoology, Harvard University, Cambridge, Mass., U.S.A.*)

In 1925 the Commission (Opinion 90) declined to validate the well-known name *Galeopithecus*, thereby making the name *Cynocephalus*, for a century the recognized name for the common baboons, the legal name for the colugos. This decision has not found favour among mammalogists and it has not brought stability to the name of the colugos.

2. The following quotations are from the two standard works on general mammalian classification. ". . . This would seem one of the most urgent and obvious cases for overruling priority in favour of common sense . . . Such decisions cast discredit on the Commission and impede general adoption of the Rules. . . ." (G. G. Simpson, 1945, *Bull. Amer. Mus. nat. Hist.*, **85** : 179). " Par une décision des nomenclateurs, le nom générique de *Cynocephalus* doit s'appliquer aux Galéopithèques et non aux Babouins comme ce fut l'usage pendant un siècle et demi! C'est là un bel example des absurdités auxquelles peut conduire l'application sans bon sens, sans esprit critique, de la loi de priorité." (P. P. Grassé, 1955, *Traité de Zoologie*, tome XVII, fasc. 2 : 1728).

3. Indeed, a majority of the Commission in 1925 were in favour of validating *Galeopithecus*, but this was then insufficient to suspend the Rules. Some workers still use the name *Galeopithecus* in deliberate violation of the Code, and the name *Cynocephalus* cannot yet, 41 years after Opinion 90, be used in a general context without a strong risk that the subject will be misunderstood as a baboon.

4. The relevant bibliographical data are the following:

1768 *Cynocephalus* Boddaërt, *Dierkundig Mengelwork*, **2** : 8; type, *Lemur volans* Linnaeus. This species is now variously placed in the orders Insectivora or Dermoptera.

1783 *Galeopithecus* Pallas, *Acta Acad. Sci. imp. Petropolitanae*, **4** (1780) : 208; type, *Lemur volans* Linnaeus;

1795 *Cynocephalus* G. Cuvier and É. Geoffroy Saint Hilaire, *Magas. Encyclop.* **3** : 462; type, *Simia cynocephalus* Linnaeus, a baboon.

1821 GALEOPITHECIDAE Gray, *London Med. Repos.*, **15** : 300;

1825 CYNOCEPHALINA Gray, *Ann. Philos.*, **26** : 338 (based on *Cynocephalus* Cuvier and Geoffroy Saint Hilaire).

1908 *Galeopterus* Thomas, *Ann. Mag. nat. Hist.* (8) **1** : 254; type, *Galeopithecus temmincki* Waterhouse. This genus is sometimes regarded as only subgenerically distinct from *Galeopithecus*.

1908 GALEOPTERIDAE Thomas, *ibid.*

1945 CYNOCEPHALIDAE Simpson, *Bull. Amer. Mus. nat. Hist.*, **85** : 54 (based on *Cynocephalus* Boddaërt).

5. In the most recent original work on *Galeopithecus*, D. D. Davis (1962, *Bull. nat. Mus. Singapore*, **31** : 28) explicitly refused to use the name *Cynocephalus*. A. S. Romer has also used *Galeopithecus* in the third edition of his *Vertebrate Paleontology* (Univ. Chicago Press, 1966). In a revised classification of the Insectivora now in press (*Bull. Amer. Mus. nat. Hist.*), L. Van Valen also uses *Galeopithecus* for the reasons set out in this application and in the hope that the Commission will now stabilize the name of the colugos. F. S. Szalay takes the same course in an as yet unpublished doctoral thesis (Columbia University), as does M. C. McKenna in an unpublished classification of the Mammalia. A family name based on *Cynocephalus* Boddaërt was not even used until 1945. *Papio* is now established and generally recognized as a name for some or all baboons (although author, date, and type-species are disputed). Because of its perennial ambiguity, however, we believe that the name *Cynocephalus* should be suppressed and *Galeopithecus* thereby validated.

6. We therefore request the Commission:

(1) to use its plenary powers to suppress the generic name *Cynocephalus* Boddaërt, 1768, for the purposes of the Law of Priority but not for those of the Law of Homonymy;

(2) to place the generic name *Cynocephalus* Boddaërt, 1768 (as suppressed under the plenary powers in (1) above) on the Official Index of Rejected and Invalid Generic Names in Zoology;

(3) to place the generic name *Galeopithecus* Pallas, 1783 (gender: masculine), type-species, by monotypy, *Lemur volans* Linnaeus, 1758, on the Official List of Generic Names in Zoology;

(4) to place the specific name *volans* Linnaeus, 1758, as published in the binomen *Lemur volans* (type-species of *Galeopithecus* Pallas, 1783) on the Official List of Specific Names in Zoology.

COMMENTS ON THE PROPOSED SUPPRESSION OF *CORNUFER UNICOLOR* TSCHUDI 1838 (AMPHIBIA). Z.N.(S.) 1749

(see volume 23, pp. 167–168)

Philip J. Darlington (*Museum of Comparative Zoology, Harvard University, Cambridge, Mass., U.S.A.*)
Robert F. Inger (*Field Museum of Natural History, Chicago, Ill., U.S.A.*)
Ernst Mayr (*Museum of Comparative Zoology, Harvard University, Cambridge, Mass., U.S.A.*)
Ernest E. Williams (*Museum of Comparative Zoology, Harvard University, Cambridge, Mass., U.S.A.*)

The frog genus *Cornufer* is celebrated in the biogeographical literature. The presence of an endemic species of frogs of this genus on the Fiji Islands and of other endemic species in the Solomons has been cited by many zoogeographers as irrefutable evidence for a land bridge from New Guinea through the Solomons to Fiji. As far as we know, every writer on this subject (most recently Barbour, 1923; Mertens, 1934; Brown and Myers, 1949; Darlington, 1957; Gorham, 1965) has used the name *Cornufer* Tschudi 1838, even though some herpetologists have also used the name *Platymantis* Günther 1858 for some species of this group.

The proposal of Zweifel (*Bull. zool. Nomencl.*, **23** : 167) to replace a name, so celebrated in the biological literature, for purely nomenclatural reasons, is not the best possible solution. Zweifel quite correctly asked the Commission to suppress the species *unicolor* Tschudi 1838 in order to save the validity of the well-known genus *Eleutherodactylus*, but unfortunately he also asked the Commission to suppress the well-known name *Cornufer* Tschudi. Stability of nomenclature would be served far better if the Commission would suppress all previous type designations for the genus *Cornufer* Tschudi, and designate a new type-species for this genus. The most suitable species for this purpose is *Halophila vitiensis* Girard, 1853, *Proc. Acad. nat. Sci., Philadelphia*, **6** : 423, Ovalau, Fiji. This species will remain in *Cornufer*, even if a separate genus *Platymantis* is recognized. Since Zweifel has already asked for suppression of the originally designated type-species of the genus *Cornufer*, there stands nothing in the way to the designation of *vitiensis* as the substitute type-species.

Accordingly we request the International Commission of Zoological Nomenclature to amend the application by Zweifel, as follows:

Retain 1b (suppression of *unicolor* Tschudi),
2 (placing of *Eleutherodactylus* on the Official List),
3, and 5.

But supplement it by these three actions:

(6) Suppress all previous type designations for the genus *Cornufer* by plenary action and designate the species *vitiensis* Girard 1853, as published by the binomen *Halophila vitiensis*, as the type of the genus *Cornufer* Tschudi,

(7) place the generic name *Cornufer* Tschudi 1838 on the Official List of Generic Names in Zoology, and

(8) place the specific name *vitiensis* Girard 1853 on the Official List of Specific Names in Zoology.

By the Nomenclature Committee of the American Society of Ichthyologists and Herpetologists

The committee unanimously supports this application. Dr. Zweifel has demonstrated a proper case for exercise of the Commission's plenary powers, where application of the Law of Priority would disturb stability by invalidating the well-known name of a genus that comprises more than 200 species. Suppression of the specific name *unicolor* can scarcely be justified independently, but since its reference to the genus *Eleutherodactylus* would invalidate an existing name, perhaps it should be permitted to fall with the generic name with which it was originally published.

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THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

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BULLETIN OF ZOOLOGICAL NOMENCLATURE

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SUBSCRIPTION TO THE BULLETIN

The International Trust, which is responsible for the financial affairs of the Commission and publication of the Bulletin of Zoological Nomenclature, has had under consideration the price to be charged for the annual volume. This has been fixed at £15 for some years and it is with particular pleasure that the Committee is now able to announce a substantial reduction to £12 which will become effective with Volume 25, which is due to appear in 1968. The reduction in the subscription price has been made possible by the support received from Libraries, etc., and it is anticipated that the reduced price will be maintained for some years to come.

NOTICES

(a) *Date of Commencement of Voting.*—In normal circumstances the Commission starts to vote on applications published in the *Bulletin of Zoological Nomenclature* six months after the publication of each application. Any zoologist who wishes to comment on any of the applications in the present part is invited to send his contribution, in duplicate, to the Secretariat of the Commission as quickly as possible, and in any case in time to reach the Secretariat before the close of the six-month period.

(b) *Possible use of the Plenary Powers.*—The possible use by the Commission of its plenary powers is involved in the following applications published in the present part of the *Bulletin:*

(1) Suppression of *Esox belone* var. *Maris rubri* Bloch & Schneider, 1801 and *Esox houttuyni* Walbaum, 1792 (Pisces). Z.N.(S.) 1723.

(2) Validation of SCUTELLUIDAE Richter & Richter, 1925 (Trilobita). Z.N.(S.) 1789.

(3) Designation of a type-species for *Cyathocrinites* Miller, 1821 (Crinoidea). Z.N.(S.) 1795.

(4) EITHER, Designation of a type-species for *Polygnathus* Hinde, 1879, OR, designation of a neotype for *Polygnathus dubius* Hinde, 1879 (Conodonta). Z.N.(S.) 1796.

(5) Suppression of three editions of a work by O. F. Müller, first published in 1769. Z.N.(S.) 1797.

(6) Suppression of *Phryganea maxima* Scopoli, 1763 (Insecta, Plecoptera). Z.N.(S.) 1799.

(7) Validation of *Lyrodon kefersteini* Münster, 1837 (Pelecypoda). Z.N.(S.) 1800.

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(8) Validation of *Inuus fuscatus* Blyth, 1875 (Mammalia). Z.N.(S.) 1802.
(9) Validation of PLETHODIDAE Loomis, 1900 (Pisces). Z.N.(S.) 1803.
(10) Suppression of *Charaxes jocaste* Butler, 1865 (Insecta, Lepidoptera). Z.N.(S.) 1806.

c/o British Museum (Natural History),
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July 1967

W. E. CHINA
Acting Secretary,
International Commission on
Zoological Nomenclature

COMMENTS ON THE PROPOSED DESIGNATION OF NEOTYPES FOR FOUR HEMIPTERAN SPECIES. Z.N.(S.) 1732

(see volume 23, pages 121–123)

By J. Péricart (*Montereau, France*)

Les remarques de M. I. M. Kerzhner, Académie des Sciences, Leningrad, U.R.S.S. attirent de ma part les commentaires suivants:

(1) Il faut considérer en effet *Lygaeus pygmaeus* Fall. et *Anthocoris lucorum* Fall. comme des synonymes *subjectifs* et non *objectifs*, ainsi qu'il résulte de la description de Fallén (1829).

La série de la collection Fallén communiquée par le Musée de Lund comprenait un ♂ et une ♀. Le ♂ est étiqueté " L. lucorum Fall " (sic) (probablement de la main de Zetterstedt, sec. Dr. Hugo Andersson, in litt.) et porte en outre un label rouge " Typ "; la ♀ ne porte aucun label. L'annulation de cette série typique, qui ne correspond pas à la description de 1829, semble nécessaire.

Il n'existe au Musée de Lund ni ailleurs aucun type de *L. pygmaeus* Fall.; la désignation d'un néotype pour cette espèce mal définie par rapport aux espèces voisines sera ultérieurement utile.

(2) Reuter a certainement misidentifié *Anthocoris nigrellus* Zett. et *Anthocoris nigricornis* Zett.; la solution proposée par M. Kerzhner pour résoudre les problèmes de nomenclature correspondant à l'actuel genre *Elatophilus* Reuter a pour inconvénient de modifier des noms en usage dans toutes les Faunes d'Hétéroptères européens parues depuis 80 ans; l'annulation des types de Zetterstedt concernés sauvegarderait la stabilité de la nomenclature.

(3) Compte tenu de ces remarques, je maintiens toutes les demandes exprimées dans ma requeste Z.N.(S.) 1732.

By R. C. Froeschner (*Smithsonian Institution*); J. L. Herring (*U. S. Department of Agriculture*)

We agree with Dr. Péricart's expressed desire to have continued the eighty years usage based on Reuter's 1884 Monograph.

We disagree with his concern about the specimens now in the Zetterstedt collection and his conclusion that Reuter may have misidentified Zetterstedt's and Fallén's species.

Reuter's 1871 (*Ofv. Vet. Akad. Forh.* **3** : 403–429) paper was not mentioned by Mr. Pericart. It has bearing on this problem. In it (p. 403) Reuter thanked Zetterstedt and Stål for permitting him to examine materials of the Anthocoridae. No record is given for the deposit of these individual specimens examined by Reuter; they may have been kept by Reuter. Be that as it may, he clearly diagnosed and redefined the species (pp. 417–419). These concepts are the same ones he used in his 1884 Monograph. In the latter paper he also fully diagnosed as separate species all the other names mentioned in the second paragraph of Dr. Péricart's appeal.

Long use of Reuter's works reveals him to be a meticulously careful worker. His 1884 Monograph is just one example of the permanency of his results—eighty years later it is still a clear-cut, definitive landmark. To accuse him of confusing so many forms so badly, even to not recognizing his own well-defined genus *Acompocoris*, is not logical. It is more logical to doubt the results of the unknown hands which subsequently manipulated the Zetterstedt collection. Preparatorial help of unknown competency could simply have matched specimen labels with the printed record without consideration of the diagnostic characteristics. The proven prudence of Reuter's work habits, the unknown handling of the collection subsequent to Zetterstedt's time, and the fact that Reuter received study material from Zetterstedt himself, combine to mitigate against assuming a Reuter error.

The only conclusions we can reach are: (1) the so-called " syntypes " in the Lund collection should be considered mislabelled or misidentified; (2) the specimens examined by Reuter apparently have been overlooked or lost; and (3) that if neotypes are needed, they should be selected from Reuter's material to insure continuity of the eighty years usage based on his 1884 Monograph.

FURTHER COMMENTS ON SUPPRESSION OF SOME NAMES IN THE FAMILY BELONIDAE (PISCES). Z.N.(S.) 1723

(see volume 22, pages 325–329 and volume 23, pages 149–154)

By Bruce B. Collette (*Bureau of Commercial Fisheries Ichthyological Laboratory, Washington, D.C., U.S.A.*)

Additional comments are presented on several needlefish names that recently have been discussed in the *Bulletin* (Collette and Berry, 1966; Mees, 1966; Tortonese, 1967) and elsewhere (Mees, 1962, 1964; Collette and Berry, 1965) so that the Commission can have all the relevant material upon which to base its decision. Collette and Berry (1965) requested suppression of three names as *nomina oblita* under the provisions of Article 23 b. If action under the provisions of the 50-year rule is suspended, I believe it necessary to ask the Commission to suppress two names under the plenary powers. At least two of the names under discussion (*marina* and *crocodilus*) are of importance to parasitologists (working with copepods, trematodes, and cestodes) as well as to ichthyologists. The nomenclature of this family should be stabilized before completing manuscripts for an Atlantide Report (Collette and Parin, MS) and for " Fishes of the Western North Atlantic " (Collette MS). A summary of my opinions on the names for three species discussed by Collette and Berry (1966) and that for an additional species by Mees (1966) follows.

1. *Strongylura marina* (Walbaum)

Because it did not seem reasonable that a name totally unused for the 170 years after its description should replace the name usually used for the commonest species of western Atlantic needlefish, Collette and Berry (1966) applied to the Commission to suppress *houttuyni* in favour of *marina*, two names pertaining to the same species and described on the same page by Walbaum in 1792. The name *marina* is not only the name used by ichthyologists but is also the name used by parasitologists, for example by Linton in a series of papers on cestodes and trematodes from 1901 to 1940. Mees (1962) chose to ignore both provisions of Recommendation 24A—to " select the name that will best insure stability and universality of nomenclature " or, if neither name has this advantage, to " select the name that has precedence of position in the

work in question ". In defence of his selection of *houttuyni* over *marina* as " first reviser ", Mees (1966) referred to the name *Esox timucu* Walbaum as another name commonly used in the western Atlantic and to the name *Belone senegalensis* Valenciennes, 1846 as being the name commonly used for *houttuyni* in the eastern Atlantic. Both the eastern Atlantic *S. senegalensis* and the Caribbean species known as *S. timucu* are valid species. *S. marina* has only the right gonad developed while both *S. senegalensis* and *S. timucu* have the usual pair of gonads. The three species also differ in other characters, such as the number of predorsal scales (Collette and Parin, MS): 110–130, mean 122 in *S. senegalensis*; 129–185, mean 156 in *S. timucu*; and 213–304, mean 255 in *S. marina*.

II. *Platybelone argalus* (LeSueur)

The three main points made by Collette and Berry (1965) were: (1) the name *argalus* LeSueur, 1821 is the earliest name for this particular species; (2) the figure in the original description is clearly this species and could not be any other species, and (3) after Fowler (1919 and 1930) pointed out its applicability to the species, the name *argalus* has appeared several times in the literature. This is true both in the western Atlantic (e.g., Fowler, 1941; Berry and Rivas, 1962; Cervigón, 1966) and in the eastern Atlantic (e.g. Fowler, 1963; Postel, 1959; 1960; Blache, 1962). In addition, Parin (1967) has recently used *argalus* in the western Pacific and Indian oceans. Mees (1962, 1966) considered *argalus* to be a composite partly because the fin ray counts of D 16, A 19 given in the original description are rather high; however, I have examined two specimens with these counts. The problem involving the name *argalus* is thus a biological one; Mees considers the name a composite and I believe it is applicable to the species in question. Therefore the Commission should leave the question of which name to use for this species to ichthyologists.

III. *Tylosurus crocodilus* (Peron and LeSueur)

Collette and Berry (1966) applied to the Commission to suppress *Esox belone* Var. *Maris rubri* Bloch and Schneider, 1801 because this name had not been used in the more than 160 years after its original description (except for a mention of it by Valenciennes in 1846 in his account of *Belone crocodilus* in Histoire Naturelle des Poissons). The use of *Belona crocodila* Peron and LeSueur, 1821 was recommended because it is the next oldest available name and it has had extensive use in the literature. Mees (1962 : 45) wrote that " This does not mean, however, that I agree with Weber + de Beaufort and with *all other modern authors*, that now *Belone crocodila* LeSueur (1821) becomes the oldest name available for the species . . . " (emphasis added). Not only has the name *crocodila* had wide usage in the Indo-Pacific, as Collette and Berry (1965, 1966) previously noted, but it also has had wide usage in the eastern Atlantic in the last 30 years (e.g., Fowler, 1936; Poll, 1953; Cadenat, 1950, 1960; Collignon, Rossignol, and Roux, 1957; Postel, 1959, 1960; Blache, 1962). The name *crocodila* also has been used by parasitologists, for example by Capart (1953, 1959) and Delamare-Deboutteville and Nunes-Ruivo (1954) in the Atlantic and by Pillai (1961) in the Indian Ocean for parasitic copepods. I agree with Mees (1964) that subsequent workers have ignored names such as *maris rubri* because they were originally introduced as applying to varieties rather than to species and I believe that this lends further weight to the desirability of rejecting *maris rubri*. Furthermore, Parin (1967) has just shown that two species are involved under Mees' *Belone maris rubri—T. crocodilus* and *T. choram* (Rüppell).

IV. *Tylosurus acus* (Lacépède)

The two reasons Collette and Berry (1966) gave for advocating the use of the name *Sphyraena acus* Lacépède, 1803, for the Atlantic species of *Tylosurus* with a long snout and a high number of dorsal and anal fin rays and vertebrae were: (1) it is the earliest name applicable to the species; and (2) it is the name most often used in the western Atlantic. Mees (1966) pointed out that the trivial name *acus* has been used for two different species of needlefishes in the eastern Atlantic: *Belone acus*

Risso, 1826 (a junior synonym of *Esox belone* Linnaeus) and *Sphyraena acus* Lacépède, 1803. Mees stated that the use of *acus* Lacépède would lead to confusion in the European literature. This confusion only would result if other workers accept Mees' lumping of *Strongylura*, *Tylosurus*, and five other genera that I consider valid with *Belone* (compare Mees, 1962, 1964 with Collette and Berry, 1965 and with Collette, 1966). The name *acus* Lacépède has frequently been used for this species of *Tylosurus* (sometimes as *Strongylura*) in the eastern Atlantic (e.g., Regan, 1911; Fowler, 1936; Tortonese, 1938; Lozano Rey, 1947; Ben-Tuvia, 1953; Postel, 1959, 1960; Blache, 1962) and recently by Parin (1967) in the western Pacific and Indian oceans. Moreover, *acus* Risso, 1826 was permanently taken out of consideration when it was replaced by *gracilis* Lowe, 1839. Mees (1966) further argued for *imperialis* Rafinesque, 1810 by referring to Lozano Rey (1947 : 603) who gave the Spanish vernacular name as ajuja imperial but Mees neglected to mention that Lozano Rey used *Strongylura acus* as the scientific name of the species and listed *imperialis* as a junior synonym. I believe the Commission should follow the law of priority in this case and reject Mees' request.

In conclusion, I believe the International Commission should reject previous requests on needlefish names except as follows:

(1) to use its plenary powers to suppress for the purposes of priority but not for those of homonymy the following names:
  (a) *Maris rubri* Bloch and Schneider, 1801, as published in the trinomen *Esox belone* Var. *Maris rubri*;
  (b) *houttuyni* Walbaum, 1792, as published in the binomen *Esox Houttuyni*;

(2) to place the following names on the Official List of Specific Names in Zoology:
  (a) *marina* Walbaum, 1792, as published in the binomen *Esox marinus*;
  (b) *crocodila* Peron and LeSueur in LeSueur, 1821, as published in the binomen *Belona crocodila*;

(3) to place the following names on the Index of Rejected and Invalid Specific Names in Zoology:
  (a) *Maris rubri* Bloch and Schneider, 1801, as suppressed under (1) (a);
  (b) *Houttuyni* Walbaum, 1792, as suppressed under (1) (b).

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By Frederick H. Berry (*Bureau of Commercial Fisheries Tropical Atlantic Biological Laboratory, Miami, Florida,* 33149, *U.S.A.*)*

The International Commission on Zoological Nomenclature has been asked to concern itself with the relative status of four pairs of names of four species of Belonidae, for which conflicting opinions exist. The Commission has been asked to officially accept or reject seven of these eight names.

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Collette and Berry (1965, 1966) considered the proper names to be:

(1) *Platybelone argalus* (described as *Belona argala* LeSueur, 1821)

(2) *Strongylura marina* (described as *Esox marinus* Walbaum, 1792)

(3) *Tylosurus crocodilus* (described as *Belona crocodila* Peron and LeSueur, 1821)

(4) *Tylosurus acus* (described as *Sphyraena acus* Lacépède, 1803).

For the same four species, in the same respective order, Mees (1962, 1964, 1966) used the names:

(1) *Belone platyura* (described as *Belone platyura* Bennett, 1832),

(2) *Belone houttuyni* (described as *Esox houttuyni* Walbaum, 1792),

(3) *Belone marisrubri* (described as [*Esox belone*] Var. *Maris rubri* Bloch and Schneider, 1801),

(4) *Belone imperialis* (described as *Esox imperialis* Rafinesque-Schmaltz, 1810).

Collette and Berry (1966) petitioned the Commission to reject three names and substitute three others. Our opinion for rejection of two of the names was based on the fact that they were *nomina oblita*. Because Article 23b of the Code concerning *nomina oblita* has been or may be suspended, Collette rephrased the request concerning those two names (in a manuscript that I affirm).

When Mees resurrected and used the specific names *houttuyni* of Walbaum and *marisrubri* of Bloch and Schneider, he did so in specific contradiction of Article 23b of the Code, which stipulates: " (i) After 1960, a zoologist who discovers such a name is to refer it to the Commission . . .," and " (ii) A *nomen oblitum* is not to be used unless the Commission so directs."

Mees' action was also contrary to the intent of the Code—he stated (1966 : 149) that he based his opinion of the correct name of a species " on the principles of priority and clarity of description."

Collette and Berry's opinion as to which name to use for a species is based on the two principles: (1) priority and (2) *stability of nomenclature* (see Preamble to the Code, Articles 75(a), 78(b) (ii), and 79, and Recommendations 24A and 74A).

Type specimens apparently do not exist for any of the eight nominal species under discussion. If we follow Recommendation 75A of the Code, it would be difficult to resolve the issue at this time by defining the nominal species through the designation of neotypes. The only method remaining, therefore, for stabilization of these species' names is for the Commission to decide which names are valid.

If the Commission consider the relative status of a name on the basis of clarity of description, conflicting views might be presented *ad infinitum*. This point is illustrated by the following:

(1) After referring to his first, 96-page treatment of the Belonidae as a " Preliminary Revision," presented " in an incomplete form ", Mees published a 16-page paper (1964), in which he implied that there was little more to be done in comprehending the taxonomy of the Belonidae. Some of his statements were: " Though, inevitably a few problems remain to be solved . . . "; " The statement that systematically the Belonidae are a well-known group seems justified . . . "; " I believe therefore that the systematic list on p. 325 is almost complete and will undergo only minor changes in future." These quotations are taken out of context, but I feel that this does not change their basic meaning.

Contradictions to this view are apparent. For example, a recent publication by Collette (1966) described a new genus (*Belonion*) of appreciable phylogenetic significance, and two new species.

(2) Two scientists can interpret the same set of facts relating to genera and species in decidedly different ways. Mees recognized only two genera in the Belonidae—*Belone* and *Potamorrhaphis*—and stated (1964 : 312): " All other genera proposed are one-character genera . . . " This statement is obviously a faulty piece of scientific information, based on lack of investigation of the abundant characters of generic significance (according to current thought). On the basis of " clarity of description ", Mees' selection of proper species names lacks credence because he did not study enough characters in a sufficient number of specimens.

(3) After implying that almost everything about belonid taxonomy was settled, Mees (1966) presented a lengthy reply—over 3,000 words and 35 references—to the comments of Collette and Berry (1966). Both Collette and I (in press, and herewith) have now spent additional research time replying to *his* reply.

In any action that may be taken on these names, I urge the International Commission on Zoological Nomenclature:

(1) to reject the proposal to suppress *Belona argala* LeSueur, 1821—affirming *Belona platyura* Bennett, 1832 as its junior synonym—on the principle of priority;

(2) to accept *Esox marinus* Walbaum, 1792—suppressing *Esox houttuyni* Walbaum, 1792, or declining to act on its status—on the principle of stability of nomenclature;

(3) to accept *Belona crocodila* Peron and LeSueur, 1821—suppressing "[*Esox belone*] Var. *Maris rubri*" Bloch and Schneider, 1801—on the principle of stability of nomenclature;

(4) to accept *Sphyraena acus* Lacépède, 1803—rejecting *Esox imperialis* Rafinesque-Schmaltz, 1810 or denoting it as a junior synonym—on the principle of priority.

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COMMENT ON THE PROPOSED RULING ON THE VALIDITY OF *DIDERMOCERUS* BROOKES, 1828. Z.N.(S.) 1779

(see present volume, pages 55–56)

By D. A. Hooijer (*Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands*)

Having received the application relating to *Didermocerus* Brookes, 1828, versus *Dicerorhinus* Gloger, 1841, I would like to comment as follows:

Unperturbed by Ellerman and Morrison-Scott's authoritative 1951 Checklist I have consistently if not conforming to the International Rules of Zoological Nomenclature used *Dicerorhinus* for the recent and subfossil Asiatic double-horned rhinoceros as well as for a number of Tertiary and Pleistocene African and Eurasiatic rhinocerotids, and I shall continue to do so. My reasons for this will be given. *Didermocerus* was very nearly exterminated in the literature, and I regret its recent revival. Incidentally, the opinion that the validity of *Didermocerus* is open to question as it appeared only in a sale catalogue, it should be said, was already voiced by Palmer in 1904 (*Index Generum Mammalium*. North American Fauna No. 23 : 230).

It should be emphasized that the extinct forms that have been placed with remarkable unanimity in *Dicerorhinus* by palaeomammalogists (including myself) almost certainly represent various shorter and longer lineages, and that none of them apparently is intimately bound up with the extant *Dicerorhinus sumatrensis* (Fischer) whose pre-Pleistocene ancestry is as yet unknown. These fossil species are important stratigraphically, and certainly interrelated more closely with each other than with the species of rhinocerotids with which they may be found associated at the Old World Tertiary and later sites that yield them.

Among the surviving species of rhinocerotids we do find the greatest dental and skeletal resemblance to these fossil forms in the species *Dicerorhinus sumatrensis* (Fischer), which may truly be said to represent a Miocene stage in the evolution of the dicerorhine rhinoceroses, and which is denfinitely not the most advanced among the cluster of species in the genus *Dicerorhinus* as understood by palaeontologists.

In palaeontological practice it is convenient to express morphological characteristics and even supposed relationships in the naming of fossils, and the use of the generic name *Dicerorhinus*, sanctioned by long use among specialists, both for the living and for the extinct forms indicates such a broad morphological similarity. It is to be regretted that in palaeontology the genus is often used too narrowly and practically takes over the function of the species in neontology, whereby its usefulness in indicating close resemblances of certain groups of species within a family is lost.

The application of a single generic name, *Dicerorhinus*, to the living Sumatran as well as to the extinct forms is, therefore, highly recommendable, and should be perpetuated.

Now that the Commission has taken the question of the generic name for the two-horned Asiatic rhinoceros to heart we have an excellent opportunity officially to sanction the use of *Dicerorhinus* if we adopt Alternative B as proposed in the above-cited 1967 application.

In conclusion, then, I would recommend that the International Commission on Zoological Nomenclature decide to use its powers to invalidate once and for all Brookes' 1828 work and the name *Didermocerus* published therein, and place *Dicerorhinus* on the Official List of Generic Names in Zoology.

ANCISTRODON VERSUS *AGKISTRODON*, Z.N.(S.) 671

By Curtis W. Sabrosky (*U.S. Department of Agriculture, Washington, D.C., U.S.A.*)

I have considerable sympathy with the views of Parker (1966, *Bull. zool. Nomencl.* **22** : 300–302). For some years, many zoologists, particularly in North America, have misinterpreted the phrase " an error of transcription " in the old International Rules (official English version), and have changed back to original spellings of names in the sincere (albeit erroneous) belief that they were rigorously following old Article 19 (" The original orthography of a name is to be preserved . . ."). They did not realize that the exception " une faute de transcription " of the definitive French text (Règles, 1905) really meant an error of transliteration, not of copying. A great deal of confusion and mixed usage has resulted from the error of translation committed in the original official English version of the Rules.

Unlike Parker, however, I do not regard Appendix F of the old Rules as coming under Article 86 of the new Code, which was intended to cover Opinions, i.e., definite decisions " taken by the Commission in relation to a particular name or work." The use of certain names (e.g., *Ancistrodon*) as examples illustrative of recommendations in that Appendix can scarcely be construed to meet the requirement. Inasmuch as Parker proceeded to request plenary action to restore *Ancistrodon*, I judge that he himself does not feel that his point is strong, although he may merely recognize that opinions will differ and that a concrete decision should be taken to settle the question with finality.

His broader criticism, on the new Code's reversal of the real meaning of the old Rules, is more serious and quite justified, in my view. But the trend away from emphasis on classical rules has been a strong one in recent years, culminating in Article 32 of the new Code, made retroactive to 1758 by definite decision at the London Congress.

Should we attempt to swim against the tide? Should we make exceptions, such as *Ancistrodon*? Will we thereby open up a whole series of similar applications, which will eventually create a patchwork quilt of nomenclature, and will require boring and unprofitable bookwork on the Commission's part? Is this the time to take a definite stand on such problems in general, rather than an individual decision re *Ancistrodon* versus *Agkistrodon*?

I believe that the Commission should advertise the broad question, invite comments, and study the entire problem thoroughly, to determine if an over-all plan should be developed, *before* it takes action on any single case, even under the plenary powers.

COMMENT ON THE PROPOSED SUPPRESSION OF *STRIX CAPENSIS* DAUDIN, 1800. Z.N.(S.) 1692

(see volume 24, pages 34–35)

By Kenneth C. Parkes (*Carnegie Museum, Pittsburgh, Pennsylvania, U.S.A.*)

I wish to support the proposal of Clancey that the specific name *capensis* Daudin, 1800, as published in the combination *Strix Bubo capensis*, be suppressed in order to conserve for the Grass Owls the almost universally used specific name *capensis* Smith, 1834. This is clearly a case in which the application of strict priority will upset rather than ensure nomenclatorial stability.

I have, in the past, been severely critical of certain proposals to invoke the Plenary Powers to suppress senior names. In these cases, however, the applications were made long after a substantial literature had already appeared using the name sought to be suppressed. Happily, Clancey's proposal comes before there has been time for many (if any) authors to accede to Mees' unfortunate (if technically correct) name changes. Stability of usage would have more quickly been established if Dr. Mees himself, once convinced of the availability of Daudin's little-known name, had proposed its suppression.

Dr. Mees mentions one result of the revival of *capensis* Daudin—the reversion to *Strix longimembris* Jerdon, 1839 as the oldest specific name for the Grass Owls; this name is based on the Indo-Australian group, and must be used for the African subspecies by those who believe that all of these Grass Owls are conspecific. If considered a separate species, the African Grass Owls take the name *punctata* Lichtenstein 1854. Mees does *not* mention an additional result; the name *capensis* Daudin must probably be applied to one of the African Eagle Owls. If this name is found to be applicable to the form currently known as *Bubo capensis capensis* Smith, 1834, there will be no name change, only a change of authorship. However, someone must go to the trouble of deciding exactly which of the African Eagle Owls is Levaillant's " Le Grand Duc", upon which Daudin based his name; it should be noted that Sharpe (*Cat. Birds Brit. Mus.*, 2, 1875 : 27) called Daudin's bird " this doubtful Cape species." Should some scholar decide that *Strix Bubo capensis* Daudin is applicable to some Eagle Owl *other* than the one now called *capensis* Smith, the nomenclatorial chaos ensuing is frightening to contemplate. Clancey's proposal to suppress Daudin's name is clearly the logical and desirable means of attaining nomenclatorial stability in these owls.

COMMENT ON THE PROPOSED VALIDATION OF *STERNA TSCHEGRAVA* AND *MOTACILLA PLESCHANKA* LEPECHIN, " 1770 ". Z.N.(S.) 1784

(see volume 24, pages 60–62)

By Dean Amadon (*The American Museum of Natural History, New York, U.S.A.*)

I write to urge the Commission not to adopt the proposal of G. P. Dementiev, *et al.* that it use its plenary powers to establish the names *Sterna* [=*Hydroprogne*] *tschegrava* Lepechin for the bird usually known as the Caspian Tern and *Motacilla* [=*Oenanthe*] *pleschanka* Lepechin for the bird often known as the Pied Wheatear. As I have shown elsewhere (Amadon, 1966, *Ibis*, **108** : 424–425) and as is well known, Lepechin's paper is not consistently binominal and hence his names are not available under the Code.

The applicants apparently believe that Lepechin's names can be cited from the (anonymous!) " Summarium " at the beginning of the volume, in which they appeared, but the summary of Lepechin's paper given therein is no more binominal than the paper itself.

The earliest valid names for these two birds seem to be *Sterna caspia* and *Motacilla leucomela*, respectively, both proposed by Pallas in a paper in the same volume containing that of Lepechin. Pallas' names are given further authentication in the thirteenth edition of the *Systema Naturae*, 1788, where Gmelin adopted them and placed those of Lepechin in synonymy. Gmelin thus acted as " first reviser."

Vaurie (1966, *Ibis*, **108** : 633–634) has suggested that the papers in the " 1770 " volume might have been published separately, though the applicants now admit there is no evidence of this, and that Lepechin's contribution antedates that of Pallas. Since Lepechin's paper is non-binominal, this is irrelevant. Actually, as Mr. E. Eisenmann has pointed out to me, there is internal evidence that the volume was published as a whole; at the bottom of each page the first syllable of the following page is given; this is the case even when one passes from the *last page* of *one article* to the title page of the *one following*.

The question thus becomes—Should the Commission use its plenary powers to reject Pallas' valid names and to establish Lepechin's names? This would seem unnecessary. As regards the Caspian Tern, I have pointed out (*op. cit.*) that Pallas' name was used *exclusively* for *more than one hundred years* after its appearance; and in the ensuing period has been used at least as much as Lepechin's name.

The situation as regards the Pied Wheatear is less compelling. Nevertheless, Pallas' name was used in about two-thirds of the literature for more than a century after the bird was described; while Lepechin's name *was not used at all*, apparently, *with the exception of one publication* dated 1788. In more recent times Lepechin's

name has come into general but not exclusive use for this bird. Some works, such as the important *Handbook of British Birds*, continue to use the nomenclaturally correct name *Oenanthe leucomela* (Pallas).

This Pied Wheatear is one of about 18 species of the genus *Oenanthe*. It is not a species whose name appears often in non-ornithological literature. In the most influential ornithological work to appear in the U.S.S.R. in our times, the *Birds of the Soviet Union* (1951–1954), of which two of the applicants in this proposal, Dementiev and Gladkov, were editors and contibutors, it is not given species status, but is treated as a subspecies of *Oenanthe hispanica* Linnaeus.

One assumes that the plenary powers should be invoked only when there is definitely something to be gained by doing so. In the present case, if any names were to be " suppressed ", it should probably be those of Lepechin. But since they are invalid anyway, no exercise of plenary power would seem necessary, merely an admonition from the Commission that all authors use the correct names, those of Pallas.

COMMENTS ON THE PROPOSED DESIGNATION OF A NEOTYPE FOR *OPOPSITTA MARSHALLI* IREDALE, 1946. Z.N.(S.) 1773

By H. J. deS. Disney (*The Australian Museum, Sydney, N.S.W.*)

It is considered that under Article 75 the author is wrong in proposing to set aside the holotype for a neotype. The type specimens or the original three specimens, although a bit worn, are still valid as types.

It is suggested that the correct procedure would be for the author to re-describe the bird fully from his topotypes and state very clearly where they are deposited and, if possible, a specimen or specimens should be where the types are held. If this proposal of the author is accepted it means that all slightly damaged types of birds or insects or any animal can be discarded for more perfect specimens.

By I. C. J. Galbraith (*British Museum (Natural History), London, England*)

This proposal is quite unnecessary, and if adopted would set an unfortunate precedent. Many, perhaps most, subspecies cannot be differentiated by reference to their holotypes alone. The type specimens are important mainly for establishing specific identity, and the type locality and the characters of the local population are more important for the discrimination of subspecies. Only if the type specimens disagreed with the characters of the population at the type locality would the " exceptional circumstances " necessary to the designation of a neotype exist. There is no suggestion that this is true of *Opopsitta diophthalma marshalli*. In any case, Article 75 makes no provision for the designation of a neotype, where the holotype still exists but is imperfect.

WITHDRAWAL OF THE PROPOSAL TO DESIGNATE A NEOTYPE UNDER THE PLENARY POWERS FOR *OPOPSITTA MARSHALLI* IREDALE, 1946. Z.N.(S.) 1773

(see volume 23, pages 283–284)

By Joseph M. Forshaw (*Divison of Wildlife Research, C.S.I.R.O., Canberra, A.C.T., Australia*)

I refer to the above application in which I asked the Commission to use its plenary powers to set aside the holotype of *Opopsitta marshalli* Iredale, 1946, and recognize a neotype designated by me. The differences between *marshalli* and *Opopsitta diophthalma aruensis*, with which it had been synonymized by previous authors, were not apparent from examination of the holotype of *marshalli* as all distinguishing characters had been destroyed by pests.

After consultation with Mr. E. Eisenmann and Drs. D. Amadon and C. Vaurie I now feel that my proposal is unnecessary as there is no question of the applicability of the name *marshalli* to the Cape York population of *Opopsitta diophthalma*. Therefore, I wish to withdraw my application.

COMMENT ON PROPOSED NEW TYPE FIXATIONS FOR *CRIOCERIS* MÜLLER AND *LEMA* FABRICIUS. Z.N.(S.) 1786

(see volume 24, pages 116–118)

By R. A. Crowson (*Zoology Department, University of Glasgow, Scotland*)

The proposals by Selman and Smith for action by the Commission under plenary powers to fix types for the genera *Crioceris* Müller and *Lilioceris* Reitter seem to me to be eminently reasonable and constructive, and likely to lead to the retention of these names in the sense in which they have generally been used. In the case of *Lema* Fabricius, however, I fear that the position is rather more complicated. The species which Selman and Smith propose to establish as type of the genus, *Chrysomela cyanella* Linnaeus, is one which has been subject to a good deal of misidentification in the past. As far as I remember, there is a single specimen standing over this name in the Linnaean collection in London, which is one of the grass-eating species and probably identical with that described as *Lema lichenis* Voet. In the Fabricius-determined Hunterian collection in the University of Glasgow, the specimen standing over this name is a quite different species, that later named as *Lema puncticollis* Curtis, which feeds on thistles. In other Fabricius-determined collections, both *lichenis* and *puncticollis* were placed over the name *cyanella* L., and it seems that the two species may have been regarded as opposite sexes of one. Jacoby, who first cited *cyanella* L. as the type of *Lema*, synonymized the name with *puncticollis* Curtis and treated *lichenis* as a separate species, as could be seen in the British Museum collection arranged by him.

It is not made clear in the paper of Selman and Smith which species they actually regard as the true *cyanella* L.; if it is *lichenis* Voet., then *Lema* will come to denote the grass-eating group for which Heinze proposed the new genus *Hapsidolema*, and for which Chuje and Kimote have more recently resurrected Des Gozis' name *Oulema*. If it is desired to retain a taxon corresponding to the main mass of *Lema*, excluding the relatively small grass-eating group, then this taxon will presumably have to be called *Petauristes* Latreille. This seems to me to be an undesirable change, which could be avoided by dropping *cyanella* as the type of *Lema* in favour of an unambiguous Fabrician species, of which a very suitable one would be *L. cyanea* Fabricius. It seems to me that such a type designation would involve minimal changes in previous usage.

COMMENT ON *VOLUTA MITRA*. Z.N.(S.) 1728

(see volume 24, pages 355–356)

By Curtis W. Sabrosky (*Entomology Research Division, U.S. Department of Agriculture Washington, D.C., U.S.A.*)

There is a third alternative not presented by Coan. One could apply the Rules and adopt *Voluta mitra*, with *episcopalis* as a junior synonym.

Linnaeus consistently used one type face (roman) for species and another (italics) for varieties, which he sometimes named. It is evident that Linnaeus considered *mitra* the specific name, with two named varieties, *episcopalis* and *papalis*. The numbering of *episcopalis* instead of *mitra* was undoubtedly an error, corrected in the 12th edition.

If one considers it merely an error, corrected in a later edition, the valid specific name is *mitra*. Under the well-established principle that the name of the higher taxon takes precedence over the names of its subsidiary taxa, then *mitra* is the name of choice over *episcopalis* and *papalis*. Furthermore, this is clearly the intent of Linnaeus in 1764 and 1767. In 1764 (*Mus. Ulricae:* 597), Linnaeus described *Voluta mitra*, cited for it " Syst. Nat. 10, p. 732, n. 368 " [the number associated with *episcopalis* in 1758], and listed under it three of the five references given under *episcopalis* in 1758. The usage of Dautzenberg and Bouge (1922) and of Dodge (1955) agrees with that of Linnaeus.

I believe that the treatment of this case should remain consistent with the Code, and that *mitra* Linnaeus should be adopted as the valid name of the species in preference to *episcopalis*. I note also that this would make no difference whatever in the recognition of the genus *Mitra*. The valid name of the type-species would become *Mitra mitra* (Linnaeus.)

COMMENT ON THE PROPOSED ADDITION OF *PHELSUMA ORNATUM* GRAY, 1825 TO THE OFFICIAL INDEX. Z.N.(S.) 1752

(see volume 23, pages 176–177)

The nomenclature committee of the American Society of Ichthyologists and Herpetologists unanimously opposes this application.

It appears untoward for an author to request the suppression of a valid specific name, with an extant holotype, in favour of his own recently published junior synonym, especially when the holotype of the senior taxon was continually accessible in one of the world's largest collections.

It is axiomatic that even the most capable zoologist occasionally makes a mistake. Such a mistake is not to be interred by exercise of the plenary powers of the Commission unless application of the provisions of the Code would disturb stability or universality or cause confusion (Art. 79). This petition demonstrates neither disturbance nor confusion, but at most embarrassment of the petitioner.

COMMENT ON THE PROPOSED SUPPRESSION OF *HIPPOCAMPUS ERECTUS* PERRY, 1810. Z.N.(S.) 1753

(see volume 23, page 178)

The nomenclature committee of the American Society of Ichthyologists and Herpetologists opposes this application.

Ginsburg 1937, (*Proc. U.S. nat. Mus.* **83** : 566), commenting that Perry's description of *Hippocampus erectus* agreed best with that of *Hippocampus punctulatus* Guichenot, noted that it agreed fairly well with that of *Hippocampus hudsonius* De Kay, but possibly represented some other form such as *Hippocampus kincaidi* Townsend and Barbour. Ginsburg concluded that " there is no means now of determining with absolute certainty what *erectus* actually represents." Briggs, 1958 (*Bull. Florida State Mus.* **2**(8) : 167) used the name *erectus* in place of *punctulatus*. Therefore, if the name *erectus* is to be suppressed, it would seem that such suppression should be in favour of *punctulatus* rather than *hudsonius*.

Thus, this application requests the International Commission on Zoological Nomenclature to rule, not on a question of nomenclature, but on a question of taxonomy: the identification of a certain fish from a published description and figure. This the Commission may not properly do. As is stated in the Preamble of the Code (1964 : 3), " . . . none [of the provisions of the Code] restricts the freedom of taxonomic thought or action."

COMMENT ON THE PROPOSED SUPPRESSION OF *CELLIA ERRABUNDUS* SWELLENGREBEL, 1925. Z.N.(S.) 1760

(see volume 23, pages 190–192)

By John E. Scanlon (*Walter Reed Army Institute of Research, Washington, D.C., U.S.A.*)

I have been engaged in a study of the genus *Anopheles* in south-east Asia for approximately four years and agree with the zoological conclusions of the applicants, namely: 1. that *errabundus* Swellengrebel is not related to *Anopheles philippinensis*; 2. that *errabundus* is not part of the Oriental fauna; 3. that *errabundus* is a senior synonym of *Anopheles darlingi* Root, 1926.

Examination of the most important present day texts in tropical medicine, public health and malariology readily shows that *darlingi* is an extremely widely used name, which is familiar to physicians, entomologists and others concerned with public health in the Neotropical Region. As one who is engaged in the training of physicians and entomologists in the field of malaria epidemiology, I feel that great confusion would result from the strict application of the Law of Priority in this case.

SUPPORT FOR THE PROPOSED ADDITION TO THE OFFICIAL LIST OF *BIRADIOLITES* D'ORBIGNY, 1850, AND *DURANIA* DOUVILLE, 1908. Z.N.(S.) 1765

(see volume 24, pages 36–38)

By Myra Keen (*Department of Geology, Stanford University, California, U.S.A.*)

I wish to support the petition by Ralph Myers on placing *Biradiolites* and *Durania* on the Official List. After the paper by Coogan had appeared in 1966, interpreting these in a radically different manner, I examined the nomenclatural basis for his decisions and became convinced of the error. Because his paper had wide circulation in a professional journal, it seems desirable that the correct basis for these two generic taxa should be firmly established by such a device as Dr. Myers has proposed. This will be in the interests of nomenclatural stability and in harmony with conventional usage.

COMMENT ON THE PROPOSED SUPPRESSION OF *AMPHISBAENA MILDEI* PETERS, 1879. Z.N.(S.) 1746

(see volume 23, pages 162–163)

The nomenclature committee of the American Society of Ichthyologists and Herpetologists unanimously opposes this application.

The following alternatives are available under the Code:

1. Selection of a neotype from the original type locality, and use of the name for that population—on the assumption that the original author simply failed to mention the caudal tubercles.

2. Selection of a neotype from one of the populations without caudal tubercles, found near the type locality of *A. mildei*—thus allocating the name for further use.

Either of these Alternatives would contribute to stability quite as well as the action requested of the Commission.

This group of lizards is of little significance to biologists outside of taxonomy, and shifts in the names would not be unduly disturbing. Exercise of the plenary powers is authorized only where application of the provisions of the Code would " disturb stability or universality or cause confusion " (Art. 79). The petition has not demonstrated that this is such a case.

OPINION 819

YPTHIMA HÜBNER, 1818 (INSECTA, LEPIDOPTERA): DESIGNATION OF A TYPE-SPECIES UNDER THE PLENARY POWERS

RULING.—(1) Under the plenary powers all designations for the nominal genus *Ypthima* Hübner, 1818, made prior to the present Ruling are hereby set aside, and the nominal species *Ypthima huebneri* Kirby, 1871, is hereby designated as type of that genus.

(2) The generic name *Ypthima* Hübner, 1818 (gender : feminine), type-species, by designation under the plenary powers in (1) above, *Ypthima huebneri* Kirby, 1871, is hereby placed on the Official List of Generic Names in Zoology with the Name Number 1760.

(3) The specific name *huebneri* Kirby, 1871, as published in the binomen *Ypthima huebneri* (type-species of *Ypthima* Hübner, 1818) is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2203.

(4) The generic name *Ipthima* E. C. Pye, 1873 (an unjustified emendation of *Ypthima* Hübner, 1818) is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology with the Name Number 1913.

HISTORY OF THE CASE (Z.N.(S.) 1672)

The present case was received as one of fourteen prepared by the late Mr. Francis Hemming. The application was sent to the printer on 4 December 1964 and was published on 5 April 1965 in *Bull. zool. Nomencl.* **22** : 66–67. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184) and to eight entomological serials. No comment was received.

DECISION OF THE COMMISSION

On 14 March 1967 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (67)10 either for or against the proposals set out in *Bull. zool. Nomencl.* **22** : 66–67. At the close of the prescribed voting period on 14 June 1967 the state of the voting was as follows:

Affirmative votes—nineteen (19), received in the following order: China, Holthuis, Boschma, Vokes, Mayr, Bonnet, do Amaral, Sabrosky, Binder, Alvarado, Uchida, Stoll, Tortonese, Lemche, Munroe, Mertens, Kraus, Forest, Evans

Negative votes—none (0)

Voting Papers not returned—six (6): Brinck, Hubbs, Jaczewski, Obruchev, Ride, Simpson

Original References

The following are the original references for names placed on the Official Lists and Index by the Ruling given in the present Opinion:

huebneri, Ypthima, Kirby, 1871, *Syn. Cat. diurn. Lep.*: 95
Ipthima E. C. Pye, 1873, *Zool. Record* **1871** : 363 footnote
Ypthima Hübner, 1818, *Zutr. z. Samml. exot. Schmett.* **1** : 17

CERTIFICATE

We certify that the votes cast on Voting Paper (67)10 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 819.

G. OWEN EVANS
Secretary

W. E. CHINA
Assistant Secretary

International Commission on Zoological Nomenclature
London
21 *June* 1967

OPINION 820

NAPAEA HÜBNER, [1819] (INSECTA, LEPIDOPTERA): DESIGNATION OF A TYPE-SPECIES UNDER THE PLENARY POWERS

RULING.—(1) Under the plenary powers all designations of type-species for the nominal genus *Napaea* Hübner, [1819], made prior to the present Ruling are hereby set aside, and the nominal species *Cremna eucharila* Bates, 1867, is hereby designated as type of that genus.

(2) The generic name *Napaea* Hübner, [1819] (gender : feminine), type-species, by designation under the plenary powers in (1) above, *Cremna eucharila* Bates, 1867, as interpreted by the lectotype designated by Hemming, 1964, is hereby placed on the Official List of Generic Names in Zoology with the Name Number 1761.

(3) The specific name *eucharila* Bates, 1867, as published in the binomen *Cremna eucharila* (type-species of *Napaea* Hübner, [1819]) is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2204.

HISTORY OF THE CASE (Z.N.(S.) 1673)

The present case was received as one of fourteen prepared by the late Mr. Francis Hemming. The application was sent to the printer on 4 December 1964 and was published on 5 April 1965 in *Bull. zool. Nomencl.* **22** : 67–68. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184) and to eight entomological serials. No comment was received.

DECISION OF THE COMMISSION

On 14 March 1967 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (67)11 either for or against the proposal set out in *Bull. zool. Nomencl.* **22** : 67–68. At the close of the prescribed voting period on 14 June 1967 the state of the voting was as follows:

Affirmative votes—nineteen (19), received in the following order: China, Holthuis, Boschma, Vokes, Mayr, Bonnet, do Amaral, Sabrosky, Binder, Alvarado, Uchida, Stoll, Tortonese, Lemche, Munroe, Mertens, Kraus, Forest, Evans

Negative votes—none (0)

Voting Papers not returned—six (6): Brinck, Hubbs, Jaczewski, Obruchev, Ride, Simpson

Original References

The following are the original references for names placed on Official Lists by the Ruling given in the present Opinion:

eucharila, *Cremna*, Bates, 1867, *Trans. ent. Soc. Lond.* (3) **5** : 543

Napaea Hübner, [1819], *Samml. exot. Schmett.* **1** : pl. [34]

The following is the original reference for the designation of a lectotype for the species concerned in the present Ruling:
For *Cremna eucharila* Bates, 1867: Hemming, 1964, *Annot. lep.* **1** : 102

CERTIFICATE

We certify that the votes cast on Voting Paper (67)11 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 820.

G. OWEN EVANS
Secretary

W. E. CHINA
Assistant Secretary

International Commission on Zoological Nomenclature
London
21 *June* 1967

OPINION 821

IASPIS KAYE, 1904 (INSECTA, LEPIDOPTERA): DESIGNATION OF A TYPE-SPECIES UNDER THE PLENARY POWERS

RULING.—(1) Under the plenary powers all designations of type-species for the nominal genus *Iaspis* Kaye, 1904, made prior to the present Ruling are hereby set aside, and the nominal species *Thecla temesa* Hewitson, [1868], is hereby designated as type of that genus.

(2) The generic name *Iaspis* Kaye, 1904 (gender : feminine), type-species, by designation under the plenary powers in (1) above, *Thecla temesa* Hewitson, [1868], is hereby placed on the Official List of Generic Names in Zoology with the Name Number 1762.

(3) The specific name *temesa* Hewitson, [1868], as published in the binomen *Thecla temesa* (type-species of *Iaspis* Kaye, 1904) is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2205.

HISTORY OF THE CASE (Z.N.(S.) 1674)

The present case was received as one of fourteen prepared by the late Mr. Francis Hemming. The application was sent to the printer on 4 December 1964 and was published on 5 April 1965 in *Bull. zool. Nomencl.* **22** : 68–69. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool .Nomencl.* **21** : 184) and to eight entomological serials. No comment was received.

DECISION OF THE COMMISSION

On 14 March 1967 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (67)12 either for or against the proposal set out in *Bull. zool. Nomencl.* **22** : 69. At the close of the prescribed voting period on 14 June 1967 the state of the voting was as follows:

Affirmative votes—nineteen (19), received in the following order: China, Holthuis, Boschma, Vokes, Mayr, Bonnet, do Amaral, Sabrosky, Binder, Alvarado, Uchida, Stoll, Tortonese, Lemche, Munroe, Mertens, Kraus, Forest, Evans

Negative votes—none (0)

Voting Papers not returned—six (6): Brinck, Hubbs, Jaczewski, Obruchev, Ride, Simpson

Original References

The following are the original references for names placed on Official Lists by the Ruling given in the present Opinion:

Iaspis Kaye, 1904, *Trans. ent. Soc. Lond.* **1904** : 196

temesa, *Thecla*, Hewitson, [1868], *Descr. new Spec. Lycaenidae*: 1, No. 2

CERTIFICATE

We certify that the votes cast on Voting Paper (67)12 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decison so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 821.

G. OWEN EVANS
Secretary

W. E. CHINA
Assistant Secretary

International Commission on Zoological Nomenclature
London
21 *June* 1967

OPINION 822

PITHECOPS HORSFIELD, [1828] (INSECTA, LEPIDOPTERA): DESIGNATION OF A TYPE-SPECIES UNDER THE PLENARY POWERS

RULING.—(1) Under the plenary powers all designations of type-species for the nominal genus *Pithecops* Horsfield, [1828], made prior to the present Ruling are hereby set aside, and the nominal species *Pithecops corax* Fruhstorfer, [1919], is hereby designated as type of that genus.

(2) The generic name *Pithecops* Horsfield, [1828] (gender : masculine) type-species, by designation under the plenary powers in (1) above, *Pithecops corax* Fruhstorfer, [1919], is hereby placed on the Official List of Generic Names in Zoology with the Name Number 1763.

(3) The specific name *corax* Fruhstorfer, [1919], as published in the combination *Pithecops hylax corax* (type-species of *Pithecops* Horsfield, [1828]) is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2206.

HISTORY OF THE CASE (Z.N.(S.) 1675)

The present case was received as one of fourteen prepared by the late Mr. Francis Hemming. The application was sent to the printer on 4 December 1964 and was published on 5 April 1965 in *Bull. zool. Nomencl.* **22** : 69–71. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184) and to eight entomological serials.

A counter-proposal was submitted by Lt.-Col. C. F. Cowan (*Bull. zool. Nomencl.* **22** : 209–210) who was supported by Dr. L. E. Couchman (*Bull. zool. Nomencl.* **23** : 6–7).

DECISION OF THE COMMISSION

On 14 March 1967 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (66)13, in Part 1 either for or against the use of the plenary powers in the present case, and in Part 2 for either Alternative A (Hemming proposals, *Bull. zool. Nomencl.* **22** : 71) or for Alternative B (Cowan proposals, *Bull. zool. Nomencl.* **22** : 209–210). At the close of the prescribed voting period on 14 June 1967 the state of the voting was as follows:

Part 1. Affirmative votes—nineteen (19), received in the following order: China, Holthuis, Boschma, Vokes, Mayr, Bonnet, do Amaral, Sabrosky, Binder, Alvarado, Uchida, Stoll, Tortonese, Lemche, Munroe, Mertens, Kraus, Forest, Evans

Negative votes—none (0)

Part 2. For Alternative A—one (1): Bonnet

For Alternative B—eighteen (18): China, Holthuis, Boschma, Vokes, Mayr, do Amaral, Sabrosky, Binder, Alvarado, Uchida, Stoll, Tortonese, Lemche, Munroe, Mertens, Kraus, Forest, Evans

Voting Papers not returned—six (6): Brinck, Hubbs, Jaczewski, Obruchev, Ride, Simpson

Original References

The following are the original references for names placed on Official Lists by the Ruling given in the present Opinion:

corax, *Pithecops hylax*, Fruhstorfer, [1919], *Arch. Naturgesch.* **83,** Sect. A.1 (1917) : 79

Pithecops Horsfield, [1828], *Descr. Cat. lep. Ins. Mus. East India Coy.* (1) : 66

CERTIFICATE

We certify that the votes cast on Voting Paper (67)13 were cast as set out above, that the proposal contained in that Voting Paper as Alternative B has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 822.

G. OWEN EVANS
Secretary

W. E. CHINA
Assistant Secretary

International Commission on Zoological Nomenclature
London
21 *June* 1967

OPINION 823

ARISBE HÜBNER, [1819] (INSECTA, LEPIDOPTERA): DESIGNATION OF A TYPE-SPECIES UNDER THE PLENARY POWERS

RULING.—(1) Under the plenary powers all designations of type-species for the nominal genus *Arisbe* Hübner, [1819], made prior to the present Ruling are hereby set aside, and the nominal species *Papilio leonidas* Fabricius, 1793, is hereby designated as type of that genus.

(2) The generic name *Arisbe* Hübner, [1819] (gender : feminine), type-species, by designation under the plenary powers in (1) above, *Papilio leonidas* Fabricius, 1793, is hereby placed on the Official List of Generic Names in Zoology with the Name Number 1764.

(3) The specific name *leonidas* Fabricius, 1793, as published in the binomen *Papilio leondias* (type-species of *Arisbe* Hübner, [1819]) is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2207.

HISTORY OF THE CASE (Z.N.(S.) 1676)

The present case was received as one of fourteen prepared by the late Mr. Francis Hemming. The application was sent to the printer on 4 December 1964 and was published on 5 April 1965 in *Bull. zool. Nomencl.* **22** : 71–72. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184) and to eight entomological serials. No comment was received.

DECISION OF THE COMMISSION

On 14 March 1967 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (67)14 either for or against the proposals set out in *Bull. zool. Nomencl.* **22** : 72. At the close of the prescribed voting period on 14 June 1967 the state of the voting was as follows:

Affirmative votes—nineteen (19), received in the following order: China, Holthuis, Boschma, Vokes, Mayr, Bonnet, do Amaral, Sabrosky, Binder, Alvarado, Uchida, Stoll, Tortonese, Lemche, Munroe, Mertens, Kraus, Forest, Evans

Negative votes—none (0)

Voting Papers not returned—six (6): Brinck, Hubbs, Jaczewski, Obruchev, Ride, Simpson

Original References

The following are the original references for names placed on Official Lists by the Ruling given in the present Opinion:

Arisbe Hübner, [1819], *Verz. bekannt. Schmett.* (6) : 89

leonidas, Papilio, Fabricius, 1793, *Ent. syst.* **3** : 35

CERTIFICATE

We certify that the votes cast on Voting Paper (67)14 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 823.

G. OWEN EVANS
Secretary

W. E. CHINA
Assistant Secretary

International Commission on Zoological Nomenclature
London
23 *June* 1967

OPINION 824

PHRISSURA BUTLER, 1870 (INSECTA, LEPIDOPTERA): DESIGNATION OF A TYPE-SPECIES UNDER THE PLENARY POWERS

RULING.—(1) Under the plenary powers all designations of type-species for the nominal genus *Phrissura* Butler, 1870, made prior to the present Ruling are hereby set aside, and the nominal species *Pieris illana* C. & R. Felder, 1862, is hereby designated as type of that genus.

(2) The generic name *Phrissura* Butler, 1870 (gender : feminine), type-species, by designation under the plenary powers in (1) above, *Pieris illana* C. & R. Felder, 1862, is hereby placed on the Official List of Generic Names in Zoology with the Name Number 1765.

(3) The specific name *illana* C. & R. Felder, 1862, as published in the binomen *Pieris illana* (type-species of *Phrissura* Butler, 1870) is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2208.

HISTORY OF THE CASE (Z.N.(S.) 1677)

The present case was received as one of fourteen prepared by the late Mr. Francis Hemming. The application was sent to the printer on 4 December 1964 and was published on 5 April 1965 in *Bull. zool. Nomencl.* **22** : 72–73. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184) and to eight entomological serials. No comment was received.

DECISION OF THE COMMISSION

On 14 March 1967 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (67)15 either for or against the proposal relating to *Phrissura* Butler, as set out in *Bull. zool. Nomencl.* **22** : 73. At the close of the prescribed voting period on 14 June 1967 the state of the voting was as follows:

Affirmative votes—nineteen (19), received in the following order: China, Holthuis, Boschma, Vokes, Mayr, Bonnet, do Amaral, Sabrosky, Binder, Alvarado, Uchida, Stoll, Tortonese, Lemche, Munroe, Mertens, Kraus, Forest, Evans

Negative votes—none (0)

Voting Papers not returned—six (6): Brinck, Hubbs, Jaczewski, Obruchev, Ride, Simpson

Original References

The following are the original references for names placed on Official Lists by the Ruling given in the present Opinion:

illana, *Pieris*, C. & R. Felder, 1862, *Wien. ent. Monats.* **6** : 287
Phrissura Butler, 1870, *Cistula ent.* **1** : 37, 49

CERTIFICATE

We certify that the votes cast on Voting Paper (67)15 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 824.

G. OWEN EVANS
Secretary

W. E. CHINA
Assistant Secretary

International Commission on Zoological Nomenclature
London
23 *June* 1967

OPINION 825

ADOPAEOIDES GODMAN, [1900] (INSECTA, LEPIDOPTERA): DESIGNATION OF A TYPE-SPECIES UNDER THE PLENARY POWERS

RULING.—(1) Under the plenary powers all designations of type-species for the nominal genus *Adopaeoides* Godman, [1900], made prior to the present Ruling are hereby set aside, and the nominal species *Apaustus prittwitzi* Plötz, 1884, is hereby designated as type of that genus.

(2) The generic name *Adopaeoides* Godman, [1900] (gender : masculine), type-species, by designation under the plenary powers in (1) above, *Apaustus prittwitzi* Plötz, 1884, is hereby placed on the Official List of Generic Names in Zoology with the Name Number 1766.

(3) The specific name *prittwitzi* Plötz, 1884, as published in the binomen *Apaustus prittwitzi* (type-species of *Adopaeoides* Godman, [1900]) is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2209.

HISTORY OF THE CASE (Z.N.(S.) 1678)

The present case was received as one of fourteen prepared by the late Mr. Francis Hemming. The application was sent to the printer on 4 December 1964 and was published on 5 April in 1965 *Bull. zool. Nomencl.* **22** : 73. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184) and to eight entomological serials. No comment was received.

DECISION OF THE COMMISSION

On 14 March 1967 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (67)16 either for or against the proposals relating to *Adopaeoides* Godman, as set out in *Bull. zool. Nomencl.* **22** : 73. At the close of the prescribed voting period on 14 June 1967 the state of the voting was as follows:

Affirmative votes—nineteen (19), received in the following order: China, Holthuis, Boschma, Vokes, Mayr, Bonnet, do Amaral, Sabrosky, Binder, Alvarado, Uchida, Stoll, Tortonese, Lemche, Munroe, Mertens, Kraus, Forest, Evans

Negative votes—none (0)

Voting Papers not returned—six (6): Brinck, Hubbs, Jaczewski, Obruchev, Ride, Simpson

Original References

The following are the original references for names placed on Official Lists by the Ruling given in the present Opinion:

Adopaeoides Godman, [1900], *in* Godman & Salvin, *Biol. centr.-amer.*, Lep. Rhop. **2** : 470

prittwitzi, *Apaustus*, Plötz, 1884, *Ent. Ztg.*, Stettin **45** : 165

CERTIFICATE

We certify that the votes cast on Voting Paper (67)16 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 825.

G. OWEN EVANS
Secretary

W. E. CHINA
Assistant Secretary

International Commission on Zoological Nomenclature
London
23 *June* 1967

OPINION 826

ARTINES GODMAN, [1901] (INSECTA, LEPIDOPTERA): DESIGNATION OF A TYPE-SPECIES UNDER THE PLENARY POWERS

RULING.—(1) Under the plenary powers all designations of type-species for the nominal genus *Artines* Godman, [1901], made prior to the present Ruling are hereby set aside and the nominal species *Hesperia aquilina* Plötz, 1883, is hereby designated as type of that genus.

(2) The generic name *Artines* Godman, [1901] (gender : masculine), type-species, by designation under the plenary powers in (1) above, *Hesperia aquilina* Plötz, 1883, is hereby placed on the Official List of Generic names in Zoology with the Name Number 1767.

(3) The specific name *aquilina* Plötz, 1883, as published in the binomen *Hesperia aquilina* (type-species of *Artines* Godman, [1901]) is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2210.

HISTORY OF THE CASE (Z.N.(S.) 1679)

The present case was received as one of fourteen prepared by the late Mr. Francis Hemming. The application was sent to the printer on 4 December 1964 and was published on 5 April 1965 in *Bull. zool. Nomencl.* **22** : 74. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184) and to eight entomological serials. No comment was received.

DECISION OF THE COMMISSION

On 14 March 1967 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (67)17 either for or against the proposal set out in *Bull. zool. Nomencl.* **22** : 74. At the close of the prescribed voting period on 14 June 1967 the state of the voting was as follows:

Affirmative votes—nineteen (19), received in the following order: China, Holthuis, Boschma, Vokes, Mayr, Bonnet do Amaral, Sabrosky, Binder, Alvarado, Uchida, Stoll, Tortonese, Lemche, Munroe, Mertens, Kraus, Forest, Evans

Negative votes—none (0)

Voting Papers not returned—six (6): Brinck, Hubbs, Jaczewski, Obruchev, Ride, Simpson

Original References

The following are the original references for names placed on Official Lists by the Ruling given in the present Opinion:

aquilina, Hesperia, Plötz, 1883, *Ent. Ztg.*, Stettin **44** : 33

Artines Godman, [1901], *in* Godman & Salvin, *Biol. centr.-amer.*, Lep. Rhop. **2** : 608

CERTIFICATE

We certify that the votes cast on Voting Paper (67)17 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decison so taken, being the decision of the International Commission, is truly recorded in the present Opinion 826.

G. OWEN EVANS
Secretary

W. E. CHINA
Assistant Secretary

International Commission on Zoological Nomenclature
London
23 *June* 1967

OPINION 827

GEGENES HÜBNER, [1819] (INSECTA, LEPIDOPTERA): DESIGNATION OF A TYPE-SPECIES UNDER THE PLENARY POWERS

RULING.—(1) Under the plenary powers all designations of type-species for the nominal genus *Gegenes* Hübner, [1819], made prior to the present Ruling are hereby set aside, and the nominal species *Papilio pumilio* Hoffmansegg, 1803, is hereby designated as type of that genus.

(2) The generic name *Gegenes* Hübner, [1819] (gender : masculine), type-species, by designation under the plenary powers in (1) above, *Papilio pumilio* Hoffmansegg, 1803, as interpreted by the lectotype designated by Hemming, 1964, is hereby placed on the Official List of Generic Names in Zoology with the Name Number 1768.

(3) The specific name *pumilio* Hoffmansegg, 1803, as published in the binomen *Papilio pumilio* (type-species of *Gegenes* Hübner, [1819]) is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2211.

HISTORY OF THE CASE (Z.N.(S.) 1680)

The present case was received as one of fourteen prepared by the late Mr. Francis Hemming. The application was sent to the printer on 4 December 1964 and was published on 5 April 1965 in *Bull. zool. Nomencl.* **22** : 74–76. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184) and to eight entomological serials. No comment was received.

DECISION OF THE COMMISSION

On 14 March 1967 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (67)18 either for or against the proposals set out in *Bull. zool. Nomencl.* **22** : 75–76. At the close of the prescribed voting period on 14 June 1967 the state of the voting was as follows:

Affirmative votes—nineteen (19), received in the following order: China, Holthuis, Boschma, Vokes, Mayr, Bonnet, do Amaral, Sabrosky, Binder, Alvarado, Uchida, Stoll, Tortonese, Lemche, Munroe, Mertens, Kraus, Forest, Evans

Negative votes—none (0)

Voting Papers not returned—six (6): Brinck, Hubbs, Jaczewski, Obruchev, Ride, Simpson

Original References

The following are the original references for names placed on Official Lists by the Ruling given in the present Opinion:

Gegenes Hübner, [1819], *Verz. bekannt. Schmett.* (7) : 107

pumilio, *Papilio*, Hoffmansegg, 1803, *Mag. f. Insektenk.* (Illiger) **3** : 202

The following is the original reference for the designation of lectotype for the species concerned in the present Ruling:
For *Papilio pumilio* Hoffmansegg, 1803: Hemming, 1964, *Annot. lep.* **1** : 112

CERTIFICATE

We certify that the votes cast on Voting Paper (67)18 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 827.

G. OWEN EVANS
Secretary

W. E. CHINA
Assistant Secretary

International Commission on Zoological Nomenclature
London
26 *June* 1967

OPINION 828

HALPE MOORE, 1878 (INSECTA, LEPIDOPTERA): DESIGNATION OF A TYPE-SPECIES UNDER THE PLENARY POWERS

RULING.—(1) Under the plenary powers all designations of type-species for the nominal genus *Halpe* Moore, 1878, made prior to the present Ruling are hereby set aside, and the nominal species *Halpe moorei* Watson, 1893, is hereby designated as type of that genus.

(2) The generic name *Halpe* Moore, 1878 (gender : feminine), type-species, by designation under the plenary powers in (1) above, *Halpe moorei* Watson, 1893, is hereby placed on the Official List of Generic Names in Zoology with the Name Number 1769.

(3) The specific name *moorei* Watson, 1893, as published in the binomen *Halpe moorei* (type-species of *Halpe* Moore, 1878) is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2212.

HISTORY OF THE CASE (Z.N.(S.) 1681)

The present case was received as one of fourteen prepared by the late Mr. Francis Hemming. The application was sent to the printer on 4 December 1964 and was published on 5 April 1965 in *Bull. zool. Nomencl.* **22** : 76–77. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184) and to eight entomological serials. No comment was received.

DECISION OF THE COMMISSION

On 14 March 1967 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (67)19 either for or against the proposals relating to *Halpe* Moore, as set out in *Bull. zool. Nomencl.* **22** : 77. At the close of the prescribed voting period on 14 June 1967 the state of the voting was as follows:

Affirmative votes—nineteen (19), received in the following order: China, Holthuis, Boschma, Vokes, Mayr, Bonnet, do Amaral, Sabrosky, Binder, Alvarado, Uchida, Stoll, Tortonese, Lemche, Munroe, Mertens, Kraus, Forest, Evans

Negative votes—none (0)

Voting Papers not returned—six (6): Brinck, Hubbs, Jaczewski, Obruchev, Ride, Simpson

Original References

The following are the original references for names placed on Official Lists by the Ruling given in the present Opinion:

Halpe Moore, 1878, *Proc. zool. Soc. Lond.* **1878** (3) : 689

moorei, *Halpe*, Watson, 1893, *Proc. zool. Soc. Lond.* **1893** : 109

CERTIFICATE

We certify that the votes cast on Voting Paper (67)19 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decison so taken, being the decison of the International Commission, is truly recorded in the present Opinion No. 828.

G. OWEN EVANS
Secretary

W. E. CHINA
Assistant Secretary

International Commission on Zoological Nomenclature
London
26 *June* 1967

SCUTELLUIDAE RICHTER & RICHTER, 1925 (TRILOBITA): PROPOSED ADDITION TO THE OFFICIAL LIST OF FAMILY GROUP NAMES. Z.N.(S.) 1789

By H. K. Erben (*Institut für Paläontologie, Universität, Bonn*) and H. B. Whittington (*Department of Geology, University of Cambridge* (*Sedgwick Museum*))

The object of the present application is to conserve the generally accepted trilobite family group name SCUTELLIDAE in its amended spelling as SCUTELLUIDAE (correction by minor change because of junior homonymy).

Discussion:

1. The trilobite family consisting of taxa closely related to the genus *Scutellum* Pusch, 1833, in its present conception, not only embraces the genera characterized by an entire margin of the pygidium as in *Scutellum* but also taxa with marginal spines as in *Scabriscutellum* (*Thysanopeltis*) Hawle & Corda 1847.

2. The first family group names related to this family were published by Hawle & Corda in 1847, who gave the name BRONTEIDES to the non-spinose group characterized by the genus *Scutellum* Pusch, 1833 (syn. *Brontes* Goldfuss, 1839) and the name THYSANOPELTIDES to the spinose group represented by *Thysanopeltis* Hawle & Corda, 1847.

3. Subsequently, the family has been considered to include the taxa given under (1). *Scutellum* Pusch, 1833 (syn: *Brontes* Goldfuss, 1839; *Goldius* de Koninck, 1841; *Bronteus* Goldfuss, 1843) has been considered as the typical genus and the following family group names have been proposed:

BRONTEIDAE Hawle & Corda, 1847 (the name first being latinized by Angelin, 1854)

GOLDIIDAE Raymond, 1913

SCUTELLIDAE Richter & Richter, 1925

EOBRONTEIDAE Sinclair, 1949

4. Some of these names have not been accepted in the palaeontological literature:

BRONTEIDAE was used universally till about 1925 but later it was generally abandoned because the generic names *Brontes* Goldfuss, 1839 (junior homonym of *Brontes* Fabricius, 1801) and *Bronteus* Goldfuss, 1843, proved to be junior synonyms of *Scutellum* Pusch, 1833. The name BRONTEIDAE cannot be revived under Article 40 because its use was abandoned long before 1960.

GOLDIIDAE has not been accepted because *Goldius* de Koninck, 1841, was found to be a junior synonym of *Scutellum* Pusch, 1833.

EOBRONTEIDAE was not accepted because of the derivation of this name from the genus *Eobronteus* Reed, 1928, not identical to the type-genus of the family.

5. The name SCUTELLIDAE was introduced by Richter & Richter in 1925 to replace the name BRONTEIDAE. It has been universally accepted in spite of the

fact that it was a junior homonym of SCUTELLIDAE Gray, 1825 (Echinoidea; type-genus: *Scutella* Lamarck, 1816).

In view of the existing homonymy Richter & Richter published (but did not submit), in 1955, a proposal to the International Commission on Zoological Nomenclature, requesting it to legalize the original family name SCUTELLIDAE by the official admission of a slight modification represented by an insertion of the letter " u " before the ending. The name thus was corrected to the spelling " SCUTELL-U-IDAE." This proposal accords with the intent of Article 55, judging by the example cited. This spelling and the name itself is still being used, at present, by almost all concerned trilobite specialists, and so merits retention under Article 40(a).

6. In 1959 R. C. Moore opposed Richter & Richter's proposal and he re-introduced the abandoned name THYSANOPELTIDES Hawle & Corda, 1847, which he used as THYSANOPELTIDAE Hawle & Corda, 1847, *nom. correct.* Moore, 1959.

Since this attempt at a re-introduction of this name, i.e. since 1959, the name THYSANOPELTIDAE has been used only twice (I. Chlupač, 1966; E. B. Selwood, 1966), whereas all the other authors dealing with this family (M. Snajdr, 1960; Z. A. Maksimowa, 1960; H. B. Whittington, 1960; 1963; 1965; F. Lütke, 1965; H. K. Erben, in press; W. Haas, in press) have retained the name SCUTELLUIDAE Richter & Richter, 1925.

7. The re-introduction of the name THYSANOPELTIDES seems undesirable for the following reasons:

(a) It has never been adopted in paleontological literature from its origin in 1847 until the attempt to re-introduce it in 1959. It may therefore be considered a nomen oblitum under Article 23(b).

(b) Even after its revival, it has not been accepted generally during the past seven years.

(c) The application of this name to the whole family contradicts the very intention of its original authors who clearly (by the simultaneous introduction of the name BRONTEIDES) restricted its validity to the group of scutelluids characterized by spinose pygidia.

8. The retention of the family SCUTELLUIDAE seems desirable for the following reasons:

(a) Its corrected spelling avoids the above mentioned homonymy.

(b) It refers to the genus unanimously considered to be the type-genus of the family.

(c) It became established firmly and universally in paleontological literature and it has been retained by almost all concerned trilobite specialists in spite of the attempt to replace it. It seems that any change would in no way contribute to stability of nomenclature.

9. The authors, therefore, request the International Commission on Zoological Nomenclature:

(1) to use its plenary powers to suppress the following family-group names for the purposes of the Law of Priority but not for those of the Law of Homonymy:

(a) BRONTEIDES Hawle & Corda, 1847;
(b) GOLDIIDAE Raymond, 1913;

(2) to rule under the plenary powers that SCUTELLUIDAE is to be regarded as the correct form of the family name based on *Scutellum* Pusch, 1833, and that this name is to be given precedence over THYSANOPELTIDAE Hawle & Corda, 1847, by any zoologist who considers that *Scutellum* Pusch, 1833, and *Thysanopeltis* Hawle & Corda, 1847, belong to the same family-group taxon;

(3) to place the following family-group names on the Official List of Family-Group Names in Zoology:
(a) SCUTELLUIDAE Richter & Richter, 1925 (type-genus *Scutellum* Pusch, 1833);
(b) THYSANOPELTIDAE Hawle & Corda, 1847 (type-genus *Thysanopeltis* Hawle & Corda, 1847) (not to be given precedence over SCUTELLUIDAE Richter & Richter, 1925);

(4) to place the following generic names on the Official List of Generic Names in Zoology:
(a) *Scutellum* Pusch, 1833 (: 119) (gender : neuter), type-species, by monotypy, *Scutellum costatum* Pusch, 1833 (: 119);
(b) *Thysanopeltis* Hawle & Corda, 1847 (: 118) (gender : feminine), type-species, by monotypy, *Thysanopeltis speciosa* Hawle & Corda, 1847;

(5) to place the following specific names on the Official List of Specific Names in Zoology:
(a) *costatum* Pusch, 1833, (: 119) as published in the binomen *Scutellum costatum* (type-species of *Scutellum* Pusch, 1833);
(b) *speciosa* Hawle & Corda, 1847, (: 118) as published in the binomen *Thysanopeltis speciosa* (type-species of *Thysanopeltis* Hawle & Corda, 1847);

(6) to place the family-group names suppressed under the plenary powers in (1) above on the Official Index of Rejected and Invalid Family-Group Names in Zoology.

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—— 1963. *Mus. Compar. Zool., Bull*. **129** : 1–118
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FUSULINA GRACILIS MEEK, 1864 (FORAMINIFERIDA): PROPOSED INVALIDATION OF NEOTYPE-MATERIAL, DESIGNATION AS TYPE-SPECIES OF *EOPARAFUSULINA* COOGAN, 1960, AND RELATED ACTIONS. Z.N.(S.) 1794

By Edward C. Wilson (*Natural History Museum, San Diego, California*)

Thompson and Wheeler (1946, p. 31) designated a " neoholotype " (fig. 1) and " neoparatypes " for *Fusulina gracilis* Meek (1864, p. 4, pl. 2, figs. 1, 1a–1c) from presumed topotype specimens collected in the Lower Permian McCloud Limestone of northern California because " Meek's original specimens apparently are irretrievably lost." Coogan (1960, p. 262) named this species type-species of his subgenus *Eoparafusulina* and refigured (*op. cit.*, pl. 23, fig. 4) one of the " neoparatypes " of Thompson and Wheeler (1946, p. 1, fig. 9). Skinner and Wilde (1965, p. 73) elevated *Eoparafusulina* to generic status and argued (*op. cit.*, p. 74) that the neotype for *E. gracillis* could not be conspecific with the type-material described by Meek because of size differences. Therefore, Skinner and Wilde (1965, p. 77) referred the neotype of *E. gracilis*, as well as other specimens, to a larger associated species which they named *E. thompsoni*. They erroneously assumed *E. thompsoni* to be a replacement name for *E. gracilis*, whereas it actually was a new species for which no holotype was designated.

2. Skinner and Wilde (1965, p. 74) also considered *E. gracilis* to be the type-species of *Eoparafusulina* Coogan, 1960 and referred *E. gracilis* of Coogan (1960, p. 262, pl. 23, fig. 4) to *E. thompsoni*.

3. The type-materials of many of Meek's (1864) species have been found in the Museum of Comparative Zoology, Harvard University. Among these is a fusulinid (fig. 4) clearly designated " No. 1, *Fusulina gracilis* Meek " by a handwritten label glued to the specimen. Although now broken, this specimen seems to have served for Meek's (1864, pl. 2) figures 1 and 1a of *Fusulina gracilis*. In the same collection, a block with a polished surface showing several sections of fusulinids bears a label which reads " 25 sections of *Fusulina robusta*, Meek & *Fusulina gracilis*, Meek." None of these sections is axial or saggital.

4. A thin section (fig. 5), somewhat tangential to the axial plane, prepared by the writer from the syntype labelled " No. 1, *Fusulina gracilis* Meek " shows it to be closely comparable to Skinner and Wilde's (1965, p. 76) redescription of *Eoparafusulina gracilis* and much smaller than *E. thompsoni*. This confirms their contention (*op. cit.*, p. 74) that *E. gracilis* of Thompson and Wheeler (1946, p. 31) and Coogan (1960, p. 262) and *E. gracilis* Meek are not conspecific.

5. In the interest of partially resolving these problems, the writer desires here:

(a) to designate the syntype labelled " No. 1, *Fusulina gracilis* Meek " (figs. 4, 5) as lectotype of *Eoparafusulina gracilis* (Meek, 1864). The thin section prepared from this specimen will be filed in the Museum of Comparative Zoology, Harvard University, as type no. 3298.

(b) to designate the syntype (fig. 2) shown in figure 18, plate 34, by Skinner and Wilde (1965) as lectotype of *Eoparafusulina thompsoni* Skinner and and Wilde (1965, p. 77). This specimen was suggested for lectotype by Skinner (*in litt.*, Nov. 4, 1966). It is assumed that ICZN Article 72(d) is inapplicable in this instance, as *E. thompsoni* is not a replacement name. Other syntypes in this series are designated paralectotypes. The specimens are now at Humble Oil and Refining Company, Midland, Texas, but will be deposited in the palaeontological collections of the University of Kansas (Skinner, *in litt.*, Nov. 21, 1966).

6. To permit the above actions and stabilize the nomenclature in accordance with its rules, the International Commission on Zoological Nomenclature is requested:

(1) to invalidate the neotype and " neoparatypes " erected by Thompson and Wheeler (1946, p. 32) for *Eoparafusulina gracilis* (Meek, 1864), in accordance with ICZN Article 75 (f);

(2) to confirm *Fusulina gracilis* Meek, 1864, as type-species of *Eoparafusulina* Coogan, 1960, in accordance with ICZN Article 70 (a) (iii);

(3) to place the generic name *Eoparafusulina* Coogan, 1960 (gender : feminine), type-species, by original designation, *Fusulina gracilis* Meek, 1864, on the Official List of Generic Names in Zoology;

(4) to place the following specific names on the Official List of Specific Names in Zoology:

(a) *gracilis* Meek, 1864, as published in the binomen *Fusulina gracilis*, as interpreted by the lectotype designated in para. 5 (a) above (type-species of *Eoparafusulina* Coogan, 1960);

(b) *thompsoni* Skinner and Wilde, 1965, as published in the binomen *Eoparafusulina thompsoni*, as interpreted by the lectotype designated in para. 5 (b) above.

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Plate 1

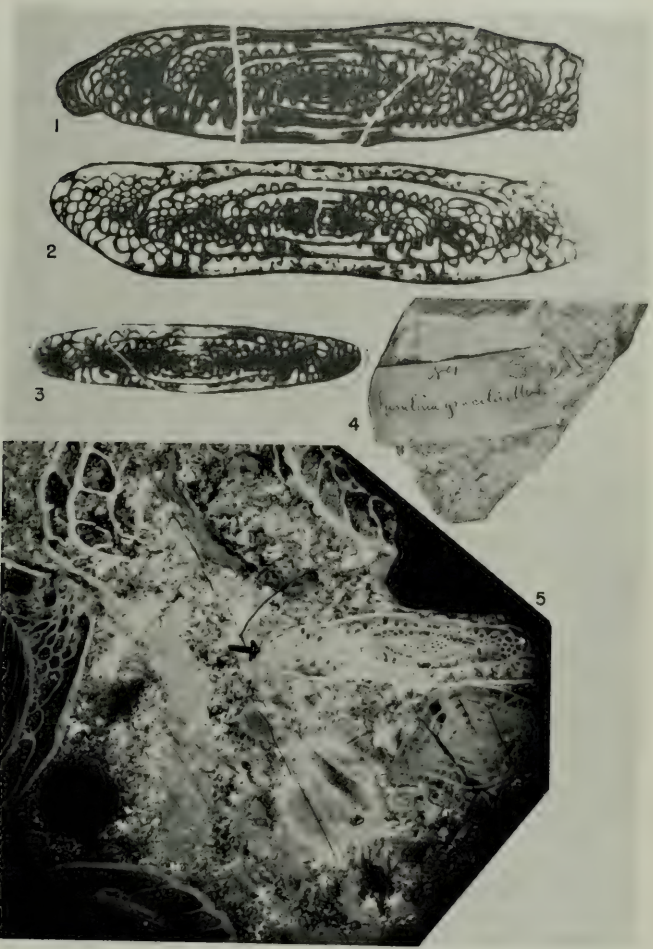
FIG. 1. *Eoparafusulina thompsoni* Skinner and Wilde, 1965.
(=*E. gracilis* neotype of Thompson and Wheeler, 1946). Axial section. x10.

FIG. 2. *E. thompsoni* Skinner and Wilde, lectotype, here designated. Axial section. x10.

FIG. 3. *E. gracilis* Meek, 1864. Hypotype of Skinner and Wilde, 1965. Axial section. x10.

FIG. 4. *E. gracilis* Meek, 1864, lectotype, here designated. Approx. x1.

FIG. 5. *E. gracilis* Meek, 1864, lectotype (at arrow), tangential axial section. Other fusulinids are *Pseudoschwagerina robusta* (Meek, 1864) and *Pseudofusulinella occidentalis* Thompson and Wheeler, 1946. x10.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CYATHOCRINITES MILLER, 1821 (CRINOIDEA): PROPOSED DESIGNATION OF A TYPE-SPECIES UNDER THE PLENARY POWERS. Z.N.(S.) 1795

By N. Gary Lane (*Dept. of Geology, Univ. Calif. at Los Angeles, Los Angeles, Calif.*, 90024, *U.S.A.*)

In order to promote stability of nomenclature this communication requests the International Commission on Zoological Nomenclature to make use of its plenary powers to annul the type-species designation for *Cyathocrinites* Miller, 1821, by Ferdinand Roemer (1851, *Verh. d. naturhist. ver. d. pruess. Rheinl.*, Jahrg. 8), and to validate the next subsequent designation by Charles Wachsmuth and Frank Springer (1880, *Rev. Palaeocr*: 1), which accords with all later usage of this genus-group name.

Cyathocrinites was proposed by J. S. Miller (1821, *Nat. Hist. Crin.*) without designation of a type-species. Four nominal species were included in the genus by Miller: *Cyathocrinites planus* Miller, *C. quinquangularis* Miller, *C. tuberculatus* Miller, and *C. rugosus* Miller. Austin and Austin (1843, *Ann. Mag. Nat. Hist.* **11**) made *Cyathocrinites rugosus* Miller the type-species, by monotypy, of their *Crotalocrinites* Austin and Austin, and *C. quinquangularis* has been universally regarded as a species of *Poteriocrinites*.

Although the genus-group name *Cyathocrinites* (=*Cyathocrinus* Agassiz, 1834) was used several times prior to Roemer's article in 1851, he was the first to make a firm designation of the type-species (*op. cit.*, p. 365): ". . . indem man den *Cyathocrinus tuberculatus* als Typus derselben betrachet . . .," which I translate as " since one can consider *Cyathocrinus tuberculatus* as type," and judge to be an unqualified, unambiguous designation of the type-species. Prior to Roemer's designation, *C. tuberculatus* had been included in the genus *Isocrinus* Phillips, 1841 (not von Meyer, 1837) by Phillips, which he later called *Taxocrinus* Phillips, 1843 (*in* Morris, *Cat. Brit. Foss.*). In neither instance did Phillips designate a type-species for his genus-group name. Consequently Roemer rightly considered *Cyathocrinites* a senior subjective synonym of *Isocrinus* Phillips and *Taxocrinus* Phillips, as well as *Cladocrinites* Austin and Austin, 1843, and so stated (*op. cit.*, p. 365): " Genus Cyathocrinus. Synon. *Isocrinus et Taxocrinus* Phillips. *Cladocrinites* Austin." Springer (1902, *Am. Geol.*: 94) ignored Roemer's type designation, although he was aware of it (Springer, 1920, *Crin. Flexibilia* : 210), and made *Cyathocrinites tuberculatus* Miller, 1821, the type-species of a monotypic genus of flexible crinoid, *Temnocrinus* Springer, 1902.

Wachsmuth and Springer (*op. cit.*, p. 79) said that *Cyathocrinites planus* Miller " ought to be the type of the genus," and (p. 81) " this has induced us to consider the Ashmolean specimen [one of Miller's original specimens] alone to be *Cyathocrinus planus* and the type of the genus." *Cyathocrinites planus* is an inadunate crinoid and all subsequent workers have considered *C. planus* to be the type of *Cyathocrinites* (Bassler, 1938, *Foss. Catalogus*, **83** : 79). Using the concept that *Cyathocrinites* refers to an inadunate crinoid, *Cyathocrinites*

has been made the type-genus of the family CYATHOCRINIDAE and the suborder Cyathocrinina, one of the major subdivisions of inadunate crinoids.

If Roemer's type designation is not annulled then *Cyathocrinites* must stand for a monotypic flexible crinoid (order Flexibilia), and cannot be used for the fossils with which the name has been associated for so many years. In this event, the next available genus-group name for fossils now called *Cyathocrinites* is *Atocrinus* M'Coy, 1844, which has been regarded as a junior synonym since 1860. Although *Saccosomopsis* Meek and Worthen, 1870, has been considered a junior synonym of *Cyathocrinites*, this writer has information as yet unpublished, that this name is referable to a distinct genus-group. Consequently, *Atocrinus* would have to be resurrected for *Cyathocrinites* and the 93 nominal species currently included.

Consequently, I request the International Commission to:

(1) make use of its plenary powers to set aside all designations of type-species for *Cyathocrinites* Miller, 1821, made prior to the Ruling now requested and, having done so, to designate *Cyathocrinites planus* Miller, 1821, to be the type-species of that genus;

(2) to place the following generic names on the Official List of Generic Names in Zoology:

(a) *Cyathocrinites* Miller, 1821 (gender : masculine), type-species, by designation under the plenary powers in (1) above, *Cyathocrinites planus* Miller, 1821;

(b) *Temnocrinus* Springer, 1902 (gender : masculine), type-species, by original designation, *Cyathocrinites tuberculatus* Miller, 1821;

(3) to place the following specific names on the Official List of Specific Names in Zoology:

(a) *planus* Miller, 1821, as published in the binomen *Cyathocrinites planus* (type-species of *Cyathocrinites* Miller, 1821);

(b) *tuberculatus* Miller, 1821, as published in the binomen *Cyathocrinites tuberculatus* (type-species of *Temnocrinus* Springer, 1902).

POLYGNATHUS HINDE, 1879 (CONODONTA): PROPOSED DESIGNATION OF A TYPE-SPECIES UNDER THE PLENARY POWERS Z.N.(S.) 1796

By Gilbert Klapper (*Research Center, Pan American Petroleum Corporation, Tulsa, Oklahoma, U.S.A.*), Maurits Lindström (*Geolog.-paläontologisches Institut, Marburg, Germany*) and Willi Ziegler (*Geologisches Landesamt Nordrhein-Westfalen, Krefeld, Germany*)

The purpose of this application is to request the International Commission on Zoological Nomenclature to use its plenary powers to ensure the stability of the name *Polygnathus* Hinde, 1879. *Polygnathus* is presently threatened because its type-species is based on a fragment, the generic and specific assignment of which is indeterminate.

2. *Polygnathus* was proposed as a new genus by Hinde (1879, p. 361–362) for *Polygnathus dubius*, which was based on about 30 discrete conodont specimens preserved on a single slab of shale from the Upper Devonian of New York, as well as for 19 other species, four of which were provisionally assigned to the genus, from various localities. Hinde did not designate a type-species for *Polygnathus*. Nor did Hinde select a holotype for *Polygnathus dubius*, presumably because he regarded the single slab as containing the remains of only one individual organism, a taxonomic opinion rejected by later specialists.

3. Miller (1889, p. 520) selected *Polygnathus dubius* as type-species of *Polygnathus*.

4. Bryant (1921, p. 23) attempted to restrict the concept of *Polygnathus* by referring only three of the specimens illustrated under the name *Polygnathus dubius* (Hinde, 1879, pl. XVI, figs. 16–18) to that genus. But Bryant's action has no nomenclatorial force, for he did not choose a lectotype for *Polygnathus dubius*.

5. Roundy (1926, p. 13) selected the specimen illustrated by Hinde (1879, pl. XVI, fig. 17) as lectotype of *Polygnathus dubius:* "I therefore propose that the genotype [type-species] *Polygnathus dubius* Hinde be restricted to the specimen shown on his Plate 16 as figure 17." Roundy stated that he had not seen Hinde's material. Nevertheless, according to the Code of Zoological Nomenclature (Art. 74), Roundy's designation must stand. Branson and Mehl's (1933, p. 146) selection of the specimen illustrated by Hinde (pl. XVI, fig. 18) as lectotype for *Polygnathus dubius* has no priority.

6. Ulrich and Bassler (1926, p. 43), Branson and Mehl (1933, p. 146) and Huddle (1934, p. 95) all stated that Bryant (1921) designated *Polygnathus pennatus* Hinde, 1879, as type-species of the genus. Nowhere in Bryant can an explicit statement to this effect be found. The above authors may have been misled by the fact that Bryant (1921, p. 23) placed *Polygnathus dubius* (*partim*) as represented by Hinde's specimen (pl. XVI, fig. 17) as a subjective synonym under *P. pennatus*. The discussion under paragraph 7 will attempt to show why this synonymy cannot be accepted.

7. The validity of the name *Polygnathus* rests on its type-species, *Polygnathus dubius* Hinde, which in turn rests on Roundy's lectotype. This specimen is an indeterminate fragment. Conodont specialists who have studied Hinde's type material are agreed in this conclusion. The lectotype is imbedded in a shale matrix which exposes only a lateral view of the specimen, thus making specific assignment impossible and generic assignment at least uncertain. Hass (1962, p. W58) suggested that the lectotype may belong to *Ancyrodella* Ulrich and Bassler, but to distinguish between *Ancyrodella* and *Polygnathus* an unobstructed view of the lower surface, at least, must be visible. Furthermore, there is no possibility of showing that the lectotype is in any way synonymous with what authors since Hinde have represented as *Polygnathus dubius*. Consequently, *Polygnathus dubius* is a *nomen dubium*, and the generic name, *Polygnathus*, is presently also a *nomen dubium*.

8. One may continue to regard *Polygnathus* as a *nomen dubium* and accept the earliest junior synonym as the name bearer of the concept, *Polygnathus*. However, we strongly advise against such a course of action. In the interest of nomenclatorial stability the name *Polygnathus* must be retained. It has had extensive, worldwide use for Devonian and Carboniferous conodonts since its proposal by Hinde and has recently assumed an importance in studies of conodont taxonomy and evolution. No beneficial purpose would be served by allowing a subjective junior synonym to take the place of *Polygnathus*.

9. Another possible alternative involves the use by the International Commission of its plenary powers to annul Roundy's designation of the specimen illustrated by Hinde (pl. XVI, fig. 17) as lectotype of *Polygnathus dubius*, and to permit the specimen illustrated by Hinde (pl. XVI, fig. 18) to be substituted. The latter specimen is imbedded in a shale matrix which exposes only the lower view. Seen only in this perspective there are at least two equally possible specific assignments for the specimen of Hinde's pl. XVI, fig. 18: *Polygnathus cristatus* Hinde, 1879, and *Polygnathus dubius* of authors. Thus, like Roundy's lectotype, the specific assignment of the specimen illustrated on Hinde's pl. XVI, fig. 18, is also in doubt. Substitution of the latter specimen as a new lectotype would not alter the fundamental situation described in paragraph 7.

10. A third alternative involves the establishment of a neotype for *Polygnathus dubius* to conform to the prevailing concept of the literature since Hinde. This course of action meets with two objections. First, there has been no " loss or destruction " of the type material of Hinde (1879), which is still available for study in the British Museum (Natural History). The second item is the fact that the stratigraphic (geological) horizon of Hinde's type material of *P. dubius* cannot be determined (John W. Huddle and the late W. H. Hass intensively studied the type locality of *P. dubius* at Eighteenmile Creek, near North Evans, New York, and have reached this conclusion; Huddle, personal communication, 1966). Thus, on two important counts, the conditions necessary for the establishment of a neotype (Code of Zoological Nomenclature, Article 75) for *Polygnathus dubius* are not fulfilled.

11. A fourth alternative involves the use by the International Commission of its plenary powers to annul the subsequent designation by Miller (1889, p.

520) of *Polygnathus dubius* as type-species of *Polygnathus* and to allow the establishment of a new type-species for the genus. Such a proposal was suggested earlier by Ziegler *et al.* (1964). We believe that this course of action has the optimum potential for ensuring the nomenclatorial stability of *Polygnathus*. We also believe that the new type-species should be a species based on a holotype that is a free specimen unimbedded in rock matrix. We emphasize the need for this last qualification, because adequate study of conodonts necessitates the viewing of all aspects of a specimen. It is for this reason that we do not advocate one of the other of Hinde's species of *Polygnathus* as the new type-species, because they are all based on specimens imbedded in shale matrix and, to a varying degree depending on which of Hinde's species might be chosen, *Polygnathus* would still have the doubtful status described under paragraph 7. Therefore, we propose that *Polygnathus robusticostatus* Bischoff & Ziegler (1957, p. 95–96), which is based on a holotype that is a free specimen, be selected as the new type-species of *Polygnathus*.

12. We therefore ask the International Commission on Zoological Nomenclature:

(1) to use its plenary powers to set aside all designations of type-species for the nominal genus *Polygnathus* Hinde, 1879, and, having done so, to designate *Polygnathus robusticostatus* Bischoff & Ziegler, 1957, to be the type-species of that genus;

(2) to place the generic name *Polygnathus* Hinde, 1879 (gender : masculine) type-species, by designation under the plenary powers in (1) above, *Polygnathus robusticostatus* Bischoff & Ziegler, 1957 on the Official List of Generic Names in Zoology;

(3) to place the specific name *robusticostatus* Bischoff & Ziegler, 1957, as published in the binomen *Polygnathus robusticostatus* (type-species of *Polygnathus* Hinde, 1879) on the Official List of Specific Names in Zoology.

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POLYGNATHUS DUBIUS HINDE, 1879 (CONODONTA): PROPOSED DESIGNATION OF A NEOTYPE UNDER THE PLENARY POWERS

By Klaus J. Müller (*Institute of Paleontology, University of Bonn, Bonn, Germany*) and David L. Clark (*Department of Geology, University of Wisconsin, Madison, Wisconsin, U.S.A.*)

We are in agreement with paragraphs 1–9 of the proposal by Klapper, Lindström and Ziegler. However, in our opinion the designation of a neotype for *Polygnathus dubius* would be preferable for the following reasons:

1. *Polygnathus dubius* is a common and well-known species and it has been used extensively in North America, Europe and Australia (Clark and Ethington, 1967; Ziegler, 1962; Glenister and Klapper, 1966).

2. *Polygnathus dubius* was recognized as the basis for subzone designation in the Middle Devonian and, subsequently, the *Polygnathus dubius* zone has gained worldwide recognition as the lower zone of the standard Upper Devonian conodont sequence (Ziegler, 1962).

3. There is agreement among all conodont students as to the taxonomic content and concept of *Polygnathus dubius*.

4. Biologically distinct and geologically useful subspecies designations of *Polygnathus dubius* have been recognized. A name change for the species would result in a complex change for the subspecies, as well. For example, Ziegler and Klapper (in Ziegler, Klapper and Lindström, 1964, p. 422–423) proposed the name *Polygnathus asymmetrica ovalis* " for the concept centering around *P. dubia dubia* sensu Bischoff and Ziegler " illustrating the agreement concerning the concept of the species but also the fact that *Polygnathus dubia asymmetrica* Bischoff and Ziegler would become *Polygnathus asymmetrica asymmetrica*.

5. The proposed new type-species *Polygnathus robusticostatus* Bischoff and Ziegler, 1957, is a different kind of *Polygnathus* from *P. dubius*. Future taxonomic difficulties could result from a change in the concept of the type.

Because a designation of a new type specimen would avoid the difficulties arising from a new concept of the type and from a name change, it is suggested to annul the type specimen designation of *Polygnathus dubius*. A neotype could then be substituted.

A suitable, well preserved and isolated specimen is available from the Squaw Bay Limestone in Michigan. It conforms to the presently agreed upon concept of *P. dubius* and will be illustrated in upper, lateral and lower views in the July, 1967, *Journal of Paleontology* (Müller and Clark, Pl. 1, fig. 5a–c, United States National Museum Number 155438). As an alternate, the specimen illustrated by Ziegler, 1958, Pl. 1, fig. 1, 2a, b, from the Martenburg near Adorf, Rheinisches Schiefergebirge in middle Europe, could be designated as neotype.

We therefore ask the International Commission on Zoological Nomenclature:

(1) to use its plenary powers to set aside all designations of type-specimens for the nominal species *Polygnathus dubius* Hinde, 1879, and having done so to designate the specimen U.S.N.M. No. 155438 to be the neotype of that species;

(2) to place the generic name *Polygnathus* Hinde, 1879 (gender : masculine), type-species, by designation by Miller, 1889, *Polygnathus dubius* Hinde, 1879, on the Official List of Generic Names in Zoology;

(3) to place the specific name *dubius* Hinde, 1879, as published in the binomen *Polygnathus dubius*, as interpreted by the neotype designated under the plenary powers (type-species of *Polygnathus* Hinde, 1879) on the Official List of Specific Names in Zoology.

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O. F. MÜLLER: EFTERRETNING OM UBEKIENDTE EEN-ØYER I VORE FÆRSKE VANDE, *KIØBENHAVNSKE EFTERRETNINGER OM LÆRDE SAGER*. II. HÆFTE (52), 28 DEC. 1769, ETC: A WORK PROPOSED FOR THE OFFICIAL INDEX OF REJECTED AND INVALID WORKS IN ZOOLOGICAL NOMENCLATURE Z.N.(S.) 1797

By Ulrik Røen (*Institute of Comparative Anatomy, Københavns Universitet, Universitetsparken* 15, *København, Denmark*)

The aim of the present proposal is to avoid the unnecessary and disturbing change in the year of publication of the names of some important Crustacea Entomostraca. The work cited in the title is extremely rare. There are three editions of it:

(a) Efterretning om ubekiendte Een-Øyer i vore færske Vande.—*Kiøbenhavnske Efterretninger om lærde sager*. II. Hæfte. Nr. 52. 28de Decbr., 1769.

(b) Efterretning om ubekiendte Een-Øyer i vore færske Vande.—*Kritisk Journal*, Kiøbenhavn. Nr. 3. 1770.

(c) A translation into Latin: Monoculi Aquarum agri Fridrichsdalensis.—*Gazette Littéraire de Berlin*. 1770.

2. As early as in 1878 C. C. A. Gosch wrote in his list of Danish zoological literature that he was able to trace the third paper only from the Royal Library in Berlin, and only the first of these papers has been accessible to me.

3. The papers have all been completely forgotten in scientific literature, and are in themselves hardly to be characterized as scientific in aim. The names *Cythere* (p. 849), *Lynceus* (p. 850), *Cyclops* (p. 851) and *Polyphemus* (p. 851) are mentioned, but without figures and with very poor descriptions from which it is impossible with certainty to recognize the animals in question. There is no indication, moreover, that the names there used were transposed by O. F. Müller when, some years later, he published them again: *Cythere: Entomostraca seu Insecta testacea quæ in Aquis Daniæ et Norvegiæ reperit, descripsit et Iconibus illustra vit.*—Havniæ p. 63. *Polyphemus:* ibid p. 118. *Lynceus: Zoologiae Danicae Prodromus.*—Havniæ 1776 p. 199. *Cyclops:* ibid. p. 200.

4. The existence of the first of these papers has been known to me for quite some time, and I have always found it completely unsuitable as a reference work for the description of important genera, but as my attention now has been called to the possibility that somebody finding it may attempt to change the adopted reference of O. F. Müller, 1785 and 1776 to O. F. Müller, 1769 for these four genera, I consider it better hereby to propose that the International Commission

(1) use its plenary powers to suppress the following papers by O. F. Müller:

(a) Efterretning om ubekiendte Een-Øyer i vore færske Vande.—*Kiøbenhavnske Efterretninger om lærde Sager*. II. Hæfte. Nr. 52. 28 de Decbr. 1769.

(b) Efterretning om ubekiendte Een-Øyer i vore færske Vande.—*Kritisk Journal*, Kiøbenhavn. Nr. 3, 1770.

(c) Monoculi Aquarum agri Fridrichsdalensis.—*Gazette Littéraire de Berlin* 1770.

(2) place the papers suppressed under (1) above on the Official Index of Rejected and Invalid Works in Zoological Nomenclature.

By Torben Wolff (*Universitets zoologiske Museum, Copenhagen, Denmark*)

Dr. U. Røen has shown me his application for the preservation of the name *Lynceus* and *Cyclops* as of O. F. Müller, 1776, and *Cythere* and *Polyphemus* of O. F. Müller, 1785. I am convinced that Dr. Røens proposals will serve stability in these names and I therefore agree with him in asking for the suppression of the papers he enumerates.

PHRYGANEA MAXIMA SCOPOLI, 1763 (INSECTA, PLECOPTERA): PROPOSED SUPPRESSION UNDER THE PLENARY POWERS. Z.N.(S.) 1799

By Carlo Consiglio (*Zoological Institute of the University of Rome, directed by Prof. Pasquale Pasquini*)

The object of the present application is to request the International Commission on Zoological Nomenclature to make a ruling that would stabilize the usage of the specific name *Perla marginata* (Panzer), as understood for over a century.

1. Scopoli, 1763 (*Entomologia Carniolica:* 269) described *Phryganea maxima* (type locality: Idria, now Idrija in Slovenia), a species whose description very clearly refers to a member of the order Plecoptera.

2. For over a century and a half, *Phryganea maxima* Scopoli was considered to be a dubious species, or held to be the same species as *Perla bipunctata* Pictet.

3. Klapálek, 1923 (*Coll. zool. Baron Edm. de Selys-Longchamps*, **4**(2) : 40) first applied the name *Perla maxima* (Scopoli) to a species that was previously described as new by Rambur, 1842 (*Hist. nat. Ins. Névr.:* 454) under the name *P. grandis*, and by Klapálek, 1900 (*Česka Akad. Cís. Fr. Jos.* (2)**9**(14) : 10) under the name *P. alpicola*.

4. Schoenemund, 1925 (*Z. f. wiss. Insektenbiol., Beilage*, **3** : 49) states that *Phryganea maxima* Scopoli is the same species as *Perla marginata* (Panzer), described as *Semblis marginata* Panzer, 1799 (*Fauna. Ins. Germ. Initia*, **6**(71)). This view was supported not only by an interpretation of Scopoli's description, but also by searching at different times of the year in the type locality of *Phryganea maxima* Scopoli without finding the species that was named *Perla alpicola* by Klapálek, 1900. Strangely enough, he continued to call *Perla marginata* by Panzer's name, claiming that this resulted from the application of the Law of Priority!

5. Aubert, 1946 (*Mitt. Schweiz. Ent. Ges.*, **20** : 18) and all following authors overlooked the Schoenemund's paper, and continued to use Scopoli's name *Perla maxima* in the sense of Klapálek, 1923.

6. In an article in press, I apply the name *Perla grandis* Rambur to the species described by Klapálek, 1900, under the name *P. alpicola*, discarding Scopoli's name *P. maxima* as referring to another species, namely *P. marginata* (Panzer).

7. However, the application to the latter species of Scopoli's name would cause a considerable confusion in the nomenclature of Plecoptera. The specific name *maxima* seems not to have been used to indicate *Perla marginata* (Panzer) after Scopoli, 1763, that is, for over two hundred years.

8. The International Commission is therefore requested:

(1) to suppress, under the plenary powers, the specific name *maxima* Scopoli, 1763, as published in the binomen *Phryganea maxima*, for the purposes of the Law of Priority but not for those of the Law of Homonymy;

(2) to place the specific name *maxima* Scopoli, 1763, as published in the binomen *Phryganea maxima*, on the Official Index of Rejected and Invalid Specific Names in Zoology;

(3) to place the specific name *marginata* Panzer, 1799, as published in the binomen *Semblis marginata*, on the Official List of Specific Names in Zoology.

MYOPHORIA KEFERSTEINI (MÜNSTER IN GOLDFUSS, 1837) (PELECYPODA): PROPOSED VALIDATION UNDER THE PLENARY POWERS. Z.N.(S.) 1800

By N. Fantini Sestini (*Institute of Palaeontology, University of Milan, Italy*)

The purpose of this note is to put before the International Commission on Zoological Nomenclature the question of the validity of the specific name *Myophoria kefersteini* (Münster, 1837), which has been subjected to doubt by a case of synonymy. In view however of the importance of this species in the stratigraphy of the Carnian of the Alps and particularly on account of the stability of nomenclature, it is considered that the Commission should be asked to retain this specific name.

The salient points of the case are summarized below:

1. The species in question was originally recognized by Münster in 1828 in material from Raibl (Carnic Alps), as a result of the work of Keferstein (1828), in which the author stated: " Unter den grösseren Muscheln zeichnet sich eine *Trigonia* aus, die der *vulgaris* aus dem Muschelkalke ähnelt; Herr Graf Münster hält sie für eine neue Art und wird sie unter dem Namen *Trigonia kefersteini* beschreiben." (Among the larger mussels is a *Trigonia* which resembles the *vulgaris* of the Muschelkalk; Count Münster considers it to be a new form and describes it under the name *Trigonia kefersteini*.) Münster did not follow up this communication during the same year with the description of the new form. According to Art. 12 of the International Code on Zoological Nomenclature, the name *kefersteini* would therefore appear to be invalid.

2. In 1835 Boué described and illustrated a fine specimen of the same species, also from Raibl. Although unaware of the work of Keferstein, he nevertheless considered the species to be new to science and termed it *Cryptina raibeliana*. According to the rules, this should be the valid name for the species.

3. In 1837 Münster finally illustrated in " Petrefacta Germaniae " (Goldfuss) a specimen of *Myophoria kefersteini* (in the binomen *Lydrodon kefersteini*) originating from Raibl, which appears to bear little resemblance to the typical form from this locality.

4. As far as can be ascertained, only Alberti (1864) subsequently confirmed the name *Cryptina raibeliana* of Boué, considering *Myophoria kefersteini* (Münster) to be among the synonyms of this species. All other authors, though not ignoring the name proposed by Boué, invariably employ the name *kefersteini* given by Münster. Waagen himself in 1907, while being fully aware of the problems of nomenclature, preferred to keep the specific name *kefersteini*, by this time well-used in palaeontological literature.

5. For the above reasons it is requested that the International Commission on Zoological Nomenclature suppress *Cryptina raibeliana* Boué under the plenary powers, and that instead the name *Myophoria kefersteini* (Münster) be substituted on account of the extensive use of the latter name in geological and palaeontological literature.

a
b
c

6. In the event of *raibeliana* being declared suppressed, the lectotype of the *kefersteini* should be the specimen illustrated by Münster in Goldfuss, 1837, pl. 136, figs. 2a, b, preserved at Munich (Bayerische Staatssammlung für Paläontologie und historische Geologie, no. AS VII 351). This specimen although somewhat incomplete and having the left valve fractured, can be considered a typical representative of *M. kefersteini*. Fig. 2a does not depict the actual left valve, but the mirror image of the right valve.

The differences between the specimen of Goldfuss and the other representatives of the species are therefore due only to an illustrational error.

The International Commission is therefore requested:

(1) to use its plenary powers to suppress the specific name *raibeliana* Boué, 1835, as published in the binomen *Cryptina raibeliana*, for the purposes of the Law of Priority but not for those of the Law of Homonymy;

(2) to place the specific name suppressed under the plenary powers in (1) above on the Official Index of Rejected and Invalid Specific Names in Zoology;

(3) to place the specific name *kefersteini* Münster, 1837, as published in the binomen *Lyrodon kefersteini*, on the Official List of Specific Names in Zoology.

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Plate 2

Myophoria kefersteini (Münster)—lectotype.
a–c: respectively right valve, left valve and postero-dorsal view.

MACACA FUSCATA (BLYTH, 1875): PROPOSED CONSERVATION AS THE NAME FOR THE JAPANESE MACAQUE (MAMMALIA). Z.N.(S.) 1802

By Jack Fooden (*Field Museum of Natural History and Illinois Teachers' College-South, Chicago*)

Macaca fuscata (Blyth, 1875) is the name applied to the Japanese red-faced stump-tailed macaque by virtually all authors in the present century. Revisory study has revealed, however, that two earlier names are available for this species.

2. The first name proposed for the Japanese macaque is *Macaca speciosa* I. Geoffroy, 1826. As explained elsewhere (Fooden, 1966, p. 153), the name *speciosa* also has been mistakenly applied by Blyth (1875, p. 6) and many later authors to another red-faced stump-tailed macaque, the southeast Asian bear macaque, *Macaca arctoides* I. Geoffroy, [1831]. The second name proposed for the Japanese macaque is *Papio japonicus* [Rennie], published anonymously in 1838 and not used thereafter, except in a footnote citation by Anderson (1878, p. 78). The third name proposed for the Japanese macaque is *I[nuus] fuscatus* Blyth, 1875.

3. Strict adherence to the principle of priority would result in displacement of *fuscata* Blyth, 1875, by *speciosa* I. Geoffroy, 1826. However, revival of *speciosa* as the name for the Japanese macaque almost certainly would lead to serious bibliographic confusion because of recent widespread, albeit incorrect use of the same name for the superficially similar bear macaque, *Macaca arctoides*. Such confusion can be avoided by formal suppression of *speciosa* I. Geoffroy, 1826.

4. To conserve *fuscata* Blyth, 1875, as the valid name of the Japanese macaque, it is also desirable to suppress the neglected *japonicus* [Rennie], 1838.

5. No action by the Commission is required with respect to the name of the southeast Asian bear macaque. For this monkey the name *arctoides* I. Geoffroy, [1831] (pp. 61, 77), based on a specimen preserved in the Museum National d'Histoire Naturelle, Paris, is available and current (Thomas, 1927, p. 43; Miller, 1933, p. 5; Pocock, 1939, p. 74; Kellogg, 1945, p. 124; Ellerman and Morrison-Scott, 1951, p. 199), and, fortunately, this name has priority over the wrongly applied *speciosa* of Blyth (1875, p.6) and later authors.

6. To avoid bibliographic confusion and to preserve nomenclatural stability, the International Commission on Zoological Nomenclature is therefore requested:

(1) to use its plenary powers to suppress the following specific names for the purposes of the Law of Priority but not for those of the Law of Homonymy:

(a) *speciosus* I. Geoffroy, 1826, p. 589, as published in the binomen *Macacus speciosus;*

(b) *japonicus* Rennie, 1838, pp. 364, 396, as published in the binomen *Papio japonicus.*

(2) to place the specific name *fuscatus* Blyth, 1875, p. 6, as published in the binomen *I[nuus] fuscatus*, on the Official List of Specific Names in Zoology.

(3) to place the specific names proposed for suppression in (1) on the Official Index of Rejected and Invalid Specific Names in Zoology.

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REQUEST FOR A RULING TO CORRECT HOMONYMY IN NAMES OF THE FAMILY-GROUPS BASED ON *PLETHODUS* (PISCES) and *PLETHODON* (CAUDATA). Z.N.(S.) 1803

By Bruce B. Collette (*Bureau of Commercial Fisheries Ichthyological Laboratory, U.S National Museum, Washington, D.C.*) and
David B. Wake (*Department of Anatomy, University of Chicago, Chicago, Illinois*)

When homonymy exists between family-group names based on similar but not identical names of type-genera, the case is to be referred to the International Commission (1964, International Code of Zoological Nomenclature, Art. 55(a)). A case of homonymy involves the family-group name PLETHODONTIDAE, in current use both in Amphibia (Caudata) and Pisces (Osteoglossiformes).

Plethodon Tschudi, 1838, is the type-genus of the family-group name PLETHODONTIDAE Gray, 1850. This family, the lungless salamanders, consists of 23 genera and about 185 species limited to the New World except for two species in southern Europe (Wake, 1966).

Plethodus Dixon, 1850, is the type-genus of the family-group name PLETHODIDAE Loomis, 1900. This family of fossil osteoglossoid fishes consists of about eight genera known from the Upper Cretaceous of Europe, North Africa, and North America (Bardack, 1965). Loomis (1900) clearly proposed a new family PLETHODIDAE for *Plethodus*, *Thryptodus*, and *Pseudothryptodus*, but for some inexplicable reason he introduced the teleost section of his paper with " Plethodidae A. S. Woodward." As a result several authors (e.g., Hay, 1929) have credited Woodward with authorship of the family PLETHODIDAE.

In his 1902 catalogue, Hay referred to Loomis (1900) as " Plethodidae, part " under OSTEOGLOSSIDAE. But then in his second edition (1929), he used the heading " Plethodontidae Woodward " and credited the description of the family to Woodward, 1912, even though he again listed Loomis (1900) with the notation PLETHODIDAE. The Zoological Record for 1936 used PLETHODONTIDAE as did Weiler (1935) and Stromer (1936). Most other workers have used either PLETHODIDAE (Berg, 1940, 1955; Bertin and Arambourg, 1957; Bardack, 1965) or THRYPTODONTIDAE (described by Jordan, 1923 : 119, as a substitute name) to avoid homonymy with the salamander family but several recent authors (e.g. Romer, 1945; Greenwood et al., 1966) have used PLETHODONTIDAE for the fossil fish family. Romer (1966) used THRYPTODONTIDAE with PLETHODONTIDAE in parentheses and on page 63 used only the former.

Both generic names, *Plethodon* and *Plethodus*, result in the family name PLETHODONTIDAE because *odon* is a variant of *odous* and they each have the genitive *odontos* (Brown, 1954). Because the salamander family is much larger and far better known to both laymen and specialists than the fossil fish family, it seems most reasonable to continue to use PLETHODONTIDAE for the salamanders. Also, two other names have been used for the fossil fishes, the incorrectly formed PLETHODIDAE and the substitute name THRYPTODONTIDAE. PLETHODIDAE is the earlier name and has been used more often so the Commission is requested:

(1) to rule under the plenary powers that PLETHODIDAE is to be accepted as the correct spelling of the family-group name based on *Plethodus* Dixon, 1850;

(2) to place the following generic names on the Official List of Generic Names in Zoology:

(a) *Plethodon* Tschudi, 1838 (:92) (gender : masculine), type-species, by subsequent designation by Bibron (*in* Bonaparte, 1839, *Icon. Fauna Ital.* **2** (26), sign. 131**, *Euproctus platycephalus* [4]) in proposing *Phatnomatorhina* as a substitute name for *Plethodon*, *Salamandra glutinosa* Green, 1818 (Caudata);

(b) *Plethodus* Dixon, 1850 (:394) (gender : masculine), type-species, by subsequent designation by Woodward, 1899, *Plethodus expansus* Dixon, 1850 (Pisces);

(3) to place the following specific names on the Official List of Specific Names in Zoology:

(a) *glutinosa* Green, 1818 (:357), as published in the binomen *Salamandra glutinosa* (type-species of *Plethodon* Tschudi, 1838) (Caudata);

(b) *expansus* Dixon, 1850 (:394), as published in the binomen *Plethodus expansus* (type-species of *Plethodus* Dixon, 1850) (Pisces);

(4) to place the following family-group names on the Official List of Family-Group Names in Zoology:

(a) PLETHODONTIDAE Gray, 1850 (:31) (type-genus *Plethodon* Tschudi, 1838) (Caudata);

(b) PLETHODIDAE Loomis, 1900 (: 229) (type-genus *Plethodus* Dixon, 1850) (Pisces);

(5) to place the following family-group name on the Official Index of Rejected and Invalid Family-Group Names in Zoology:

(a) PLETHODONTIDAE Hay, 1929 (type-genus *Plethodus* Dixon, 1850) (Ruled under the plenary powers to be an incorrect spelling for PLETHODIDAE Loomis 1900) (Pisces).

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CHARAXES JOCASTE BUTLER, 1865 (INSECTA, LEPIDOPTERA): PROPOSED SUPPRESSION UNDER THE PLENARY POWERS. Z.N.(S.) 1806

By V. G. L. van Someren (*P.O. Box* 24947, *Karen, Kenya*)

The specific name *jocaste* was first used by Doubleday, 1848, in his *List Lepidoptera British Museum*, Appendix: 28.

His name was without description or indication except that he referred to *jocaste* Boisduval MS, and stated that there were two specimens (a and b) from Senegal in the British Museum collection (Mr. Beckers Collection). This name was consequently, a nomen nudum.

2. In 1850, Westwood (in Doubleday and Westwood, *Genera Diurnal Lepidoptera*, **2** : 309, no. 17) referred to *Nymphalis Iocaste*, synonym *Charaxes Iocaste* Boisduval MS. and E. Doubleday, *List Lep. B.M.*, App.: 28. There was no description and this name also was a nomen nudum.

3. In 1865, Butler in a revison of the genus *Charaxes* (*Proc. zool. Soc. London* **1865** : 623–639) included on p. 628 under his section: " Alae fuscae, maculis pallidis submarginata: fascia media fulva, apice anticarum interrupta; posticae margine angusto pallido: subtus lunulis viridi-flavis fasciatae.", four species No. 19 *C. fabius* Fabricius, 1781 (India); no. 20 *C. lampedo* Hübner, date? (loc. unknown); no. 21 *C. iocaste* Doubleday, 1848 (Senegal) and *C. Solan* Fabricius, 1792 (loc. unknown). This name (*iocaste*) was regarded by later workers as a nomen nudum.

In 1866 C. Felder (*Reisde Ost. Freg. Novara.*, Zool. **11**, Lepid. II : 446 no. 729) described this specific taxon under the name *Charaxes achaemenes* sp. nov. based on specimens from South Africa: Port Natal, Zambesi, Coll. F.

In 1869 Butler (*Trans. ent. Soc. London* : 274 footnote) wrote: "Felder's *C. achaemenes* is the male of *C. Jocaste*; my sectional description taken in connection with the locality [Senegal], sufficiently characterized the insect, so that Felder's name must sink into a synonym." Most authors however have regarded *jocaste* Butler 1865 as an unavailable name if not a nomen nudum and have accepted *C. achaemenes* Felder, 1826, as the valid name of the taxon.

4. Art. 12 of the International Code states that names published before 1931 must have been accompanied by a description, definition *or* indication. Now Butler gave a sectional (key) description for 4 species only one of which, that from Senegal, could be *C. jocaste* Butler. Article 16 does not give *group description* + *locality* as an indication but some people would regard his argument as sound. This is more so because the two specimens from Senegal seen by Butler in the British Museum (Nat. Hist.) are still extant and agree with his description. One of them could be designated lectotype of *Charaxes jocaste* Butler, 1865, if this is regarded as an available name.

5. Later authors have preferred to use *achaemenes* Felder to Butler's doubtfully available name, and *jocaste* Butler has become a nomen oblitum. According to Article 23b such names must not be used but must be submitted to the International Commission, to be placed either on the Official Index or if such

action better serves stability and universality, on the Official List. Unfortunately Article 23b is at present under discussion by the Commission and the Secretariat has been instructed not to publish applications involving this article until some solution of the problem has been reached. In order to maintain the well used name *Charaxes achaemenes* Felder, 1866, it will therefore be necessary to suppress *Charaxes jocaste* Butler, 1865, under the plenary powers in case it is regarded as an available name.

6. The specific taxon *Charaxes achaemenes* C. Felder is now known to comprise several subspecies in various parts of Africa. That found in Senegal will need a new name if its original name *jocaste* Butler is suppressed under the plenary powers. It would be unwise to use the name *jocaste* again and the W. African subspecies will therefore be re-described by me as new.

7. The International Commission of Zoological Nomenclature is therefore requested to decide whether *Charaxes jocaste* Butler, 1865, is an available name and if so to take the following action:

(1) use its plenary powers to suppress the name *jocaste* Butler, 1865, as published in the binomen *Charaxes jocaste*, for the purposes of the Law of Priority but not for those of the Law of Homonymy;

(2) place the specific name *jocaste* Butler, 1865, as published in the binomen *Charaxes jocaste* (as suppressed under (1) above) on the Official Index of Rejected and Invalid Specific Names in Zoology;

(3) place the specific name *achaemenes* Felder, 1866, as published in the binomen *Charaxes achaemenes*, on the Official List of Specific Names in Zoology.

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The Official Organ of

THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

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INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

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BULLETIN OF ZOOLOGICAL NOMENCLATURE

Volume 24, Part 5 (pp. 257–320, 1 plate) *7th December* 1967

Commission Notes

Retirement of Dr. N. R. Stoll

Under Article 3b(1) of the Constitution, Commissioner Dr. Norman R. Stoll's membership of the Commission terminated on his 75th birthday on September 4th, 1967.

Dr. Stoll, of the Animal and Plant Pathology Department, Rockefeller Institute, New York, was first appointed to the Commission on 28 June 1944, to replace the late Secretary, Commissioner Charles Wardell Stiles and has thus been a member of the Commission for 23 years. During that time he has taken a leading part in the activities of the Commission.

Dr. Stoll attended the Colloquia in Copenhagen, 1953, and London, 1958, and was appointed Chairman of the Editorial Committee established by the XVth Zoological Congress in London in 1958. This Committee, under his wise guidance, prepared the definitive text for the new Code of Nomenclature. The events leading to its ultimate publication and the enormous amount of work involved are well set out in the excellent Introduction to the Code which Dr. Stoll himself wrote.

Following the establishment of a Council by the new Constitution adopted for the Commission by the XVIth International Congress of Zoology in Washington in 1963, Dr. Stoll was inevitably elected one of the Councillors by the Commissioners. In 1958 he was appointed to the International Trust for Zoological Nomenclature of which he is still a member.

Dr. Stoll's long years of service to the Commission will always be remembered and appreciated by those zoologists the world over who have followed the struggle to stabilize zoological nomenclature.

W. E. CHINA
Acting Secretary

Retirement of Dr. G. O. Evans from the Secretaryship

Commissioner Dr. Gwilym Owen Evans, Secretary to the International Commission since February 1965, resigned from the Secretaryship in August 1967 following his appointment as Professor of Zoology in the University of Maryland, U.S.A.

Dr. China reverts to Acting Secretary until Dr. Evans is replaced by the Council.

Death of Prof. Dr. E. M. Hering

We regret to announce the death on 18 August 1967 of Prof. Dr. E. M. Hering of Berlin. Dr. Hering was a member of the Commission from November 1950 until his resignation through ill-health in April 1964.

NOTICES

(a) *Date of Commencement of Voting.*—In normal circumstances the Commission starts to vote on applications published in the *Bulletin of Zoological Nomenclature* six months after the publication of each application. Any zoologist who wishes to comment on any of the applications in the present part is invited to send his contribution, in duplicate, to the Secretariat of the Commission as quickly as possible, and in any case in time to reach the Secretariat before the close of the six-month period.

(b) *Possible use of the Plenary Powers.*—The possible use by the Commission of its plenary powers is involved in the following applications published in the present part of the *Bulletin:*

(1) Suppression of *Argynnis chlorodippe* Villiers & Guenée, 1835 (Insecta, Lepidoptera). Z.N.(S.) 1801.

(2) Designation of a type-species for *Terebratulina* d'Orbigny, 1847 (Brachiopoda). Z.N.(S.) 1809.

(3) Suppression of three Linnaean specific names for Brachiopods. Z.N.(S.) 1810.

(4) Designations of type-species for *Tintinnidium* Kent, 1881 and *Leprotintinnus* Jörgensen, 1900 (Tintinnida). Z.N.(S.) 1811.

(5) Suppression of *Cystidea* Barrande, 1868 (Cystoidea). Z.N.(S.) 1813.

(6) Validation of *Pachyrhynchus* Germar, 1824 (Insecta, Coleoptera). Z.N.(S.) 1815.

(7) Designation of a type-species for *Lasioptera* Meigen, 1818 (Insecta, Diptera). Z.N.(S.) 1822.

(8) Suppression of *Epirhexis* Cope, 1866 (Amphibia). Z.N.(S.) 1824.

(9) Designation of a neotype for *Eschara spongites* Pallas, 1766 (Bryozoa). Z.N.(S.) 1826.

(10) Suppression of *Polanisa* Walker, 1875 (Insecta, Hymenoptera). Z.N.(S.) 1829.

(11) Suppression of *Gyrolepis giganteus* Agassiz, 1835 (Pisces). Z.N.(S.) 1690.

c/o British Museum (Natural History),
Cromwell Road,
London, S.W.7, England.
October 1967.

W. E. CHINA
Acting Secretary,
International Commission on
Zoological Nomenclature

PANTHERA OKEN, 1816 (MAMMALIA, CARNIVORA): FURTHER COMMENT ON THE PROPOSED PRESERVATION AND RENEWED APPLICATION. Z.N.(S.) 482

(see vol. 22, pages 230–232, vol. 23, pages 67–70, vol. 24, page 3)

By Helmut Hemmer (*Institut für physiologische Zoologie, University of Mainz, Germany*)

Concerning the Morrison-Scott's (*Bull. zool. Nomencl.* **23** : 230–232, 1965) request to the International Commission on Zoological Nomenclature " to validate the generic name *Panthera* Oken, 1816, as allowed by Opinion 417, and to designate *Felis pardus* L. 1758, as the type-species ", there were published in this journal unfavourable comments by Hershkovitz and Dias de Avila-Pires and a consent by Tortonese. In the interest of defending zoological nomenclature against confusion it seems highly necessary to discuss these comments.

The first mention of the name *Panthera* without any following specific name and therefore not clearly marked as a generic name may be found in Oken's " *Lehrbuch der Naturgeschichte*. 3 Theil, Zoologie, 2. Abth., Fleischthiere, Leipzig 1816 " on page 1052 for *Felis colocolo*. Abbreviated to *P.* one finds this name further on as *P. paragayensis* (p. 1052) and *P. mexicana* (p. 1054). Hence Hershkovitz is surely right concerning the first mention of *Felis colocolo*, the hitherto ascribed type of *Panthera* Oken, in saying this is " no generic name *Panthera* as used and understood by modern authors ". With regard to this the unabbreviated name *Panthera* with clear generic meaning followed by a specific name may be found in the " Lehrbuch " as *Panthera americana* (p. 1054) for the ocelot. Following this Oken used *Panthera* again in abbreviation among others for the leopard (p. 1057: " 6. Art. *P. varia, F. Leopardus* " for the *Panthera pardus leopardus* and *Panthera pardus panthera* (partim); p. 1058: " 7. Art. *P. vulgaris, Panthera, F. Pardus* " for the african leopard, especially the *Panthera pardus pardus* from Egypt). Therefore Hershkovitz seems to be wrong in writing " *Felis pardus*, as employed by Oken, has nothing to do with his "*Panthera*" and is not unequivocably the Linnean *Felis pardus* ". According to Article 69 of the International Code of Zoological Nomenclature there is no reason why *Felis pardus* L. should not be designated as type-species of *Panthera* Oken as requested by Morrison-Scott, for *Felis pardus* L. obviously has been included by Oken as one species among others in his genus *Panthera*. Article 1 of Hershkovitz's summary: " *Panthera* Oken, 1816 is an undigestible artifice " has to be rejected.

Hershkovitz states that " the most widely used name for great cats is *Felis* Linnaeus ". He cites as a proof for this view only three published faunal catalogues for North and South America and his own manuscript catalogue of South American mammals. Except in the monograph of Cabrera (Los Felidos vivientes de la Republica Argentina. *Revista del Mus. Argent. de Cienc. Nat.* " *Bernardino Rivadavia* " *e Inst. Nac. de Invest. de la Cienc. Nat.*, **6** (5), Buenos Aires 1961) of Argentine cats using *Leo* instead of *Felis* (!) for the great cats, there is no special paper on the classification of the Felidae in his list. Out of the great number of papers on this matter written by Pocock and using the name *Panthera* Hershkovitz cites only one of the earliest from 1916 recognizing five different genera of great cats. It seems that he has overlooked all following papers of the same author summarizing lion, tiger, leopard and jaguar under the generic name *Panthera*. Since Pocock's work on " The Classification of existing Felidae " (*Ann. Mag. Nat. Hist.* **20** (119) : 329–350, 1917) giving subfamily rank to the *Panthera*-group there are exactly 50 years now in which the name *Panthera* Oken was widely used not only in special taxonomic papers as given by Haltenorth (Die verwandtschaftliche Stellung der Grosskatzen zueinander I and II (*Z.f. Säugetierkde.* **11** : 32–105 and **12** : 97–240, 1936 and 1937), Zarapkin (Zur Frage der verwandtschaftlichen Stellung der Grosskatzen zueinander. Z.f. Säugetierkde. **14** : 220–224, 1939), Leyhausen (Beobachtungen an Löwen-Tiger-Bastarden mit einigen Bermerkungen zur Systematik der Grosskatzen. *Z.f. Tierpsych.*

7 : 46–83, 1950), or Weigel (Das Fellmuster der wildlebenden Katzenarten und der Hauskatze in vergleichender und stammesgeschichtlicher Hinsicht. *Säugetierkundl. Mitt.* **9**, Sonderheft, 1961), or in the fundamental Simpson's classification of mammals (The Principles of Classification and a Classification of Mammals. *Bull. Amer. Mus. Nat. Hist.*, **83** : 1–350, 1945), but also in most of the general mammalogical and non-mammalogical literature and textbooks, as already stated by Tortonese (cited above). Therefore, article 2 of Hershkovitz's summary: " The most commonly used generic name for great cats is *Felis* Linnaeus " for want of any good foundation has to be rejected too.

Subfamily rank was given to the *Panthera*-group by Pocock primarily on the basis of a character of the hyoid apparatus as Hershkovitz correctly states. But Hershkovitz quotes no published new investigation concerning this feature in assuming that this character " now proves to be even more tenuous than has been generally supposed ". Further on he is simply wrong saying: " Other characters adduced for generic separation of great cats from small as typified by *Felis catus* Linnaeus, have not withstood critical review ".

As I have shown elsewhere in detail (Hemmer, H.: Untersuchungen zur Stammesgeschichte der Pantherkatzen (Pantherinae). Part I. *Veröffentl. d. Zool. Staatssammlung München* **11** : 1–121, 1966) the four species lion, leopard, jaguar and tiger belonging to one another differ morphologically as well as behaviourally from all other genera or species groups of cats to a very much greater extent than do these groups between themselves, except the cheetah (*Acinonyx jubatus*). Beside the character of the hyoidean apparatus Pocock (On the external characters of the Felidae. *Ann. Mag. Nat. Hist.* **19** : 109, 1917) has already described two more differences between Pantherinae and Felinae concerning the rhinarium and the claw-sheaths. Sonntag (The Comparative anatomy of the tongue of the Mammalia. VIII. Carnivora. *Proc. Zool. Soc. London*, 1923) showed a further characteristic feature in the morphology of the tongue. Leyhausen (Verhaltenstudien an Katzen, 1956, and: Uber die unterschiedliche Entwicklung einiger Verhaltensweisen bei den Feliden. *Säugetierkundl. Mitt.*, **4** : 123–125, 1956) has published some behavioural differences (voice, eating attitude, tearing action, care of the fur). The ounce (*Uncia uncia*) differs enough from the taxonomically clearly defined genus *Panthera* to be given its own generic rank but phylogenetically related to the base of it. Therefore the taxonomic connection of these two genera may only be expressed by a higher taxonomic category than the generic one. The subdivision of the Felidae into the three subfamilies Pantherinae, Felinae and Acinonychinae seems to be fully justified (see Hemmer, l.c., especially pages 17–18). For the Pantherinae there may be given the following diagnosis:

Suspensorium of the hyoid imperfectly ossified, its interior portion consisting of a larger or shorter elastic tendon. Naked area of the rhinarium not, or at most with a very narrow area, reaching to the dorsal side of the nose; rhinarium itself tolerably flat, the median area narrow without definite lateral infranarial extension. Claw sheaths well developed, both upon the outer and the inner side of the claw. Spinous patch of the tongue begins close to apex of tongue, and is restricted to the anterior part of the dorsum. In the pattern of the head and neck nowhere continuous longitudinal stripes but spots only. Pupil of the eye at normal light round or nearly round. Use of " tearing action " at eating. Care of the fur, especially concerning the face, not very thorough. Tail generally stretched out backwards in sitting or resting attitude.

These explanations may show that article 3 of Hershkovitz's summary: " There is no strong evidence that great cats typified by the leopard, *Felis pardus* Linnaeus, are generically distinct from small cats typified by *Felis catus* Linnaeus " has also to be rejected.

In his article 4, Hershkovitz speaks of a " current and spreading usage " of the name *Leo* Brehm for great cats which " promotes stability, meets with no serious objections and results in no confusion ". I can see no proof for this view of current and spreading usage of *Leo*. Placing the name *Leo* Brehm on the Official List of Generic Names in Zoology in place of *Panthera* Oken would contradict the stability

of nomenclature and result in the greatest confusion. Such an unnecessary change in the name of one of the widely known genera of animals would be beyond every reasonable regulation of nomenclature. In requesting the International Commission of Zoological Nomenclature to place the name *Panthera* Oken on the Official List of Rejected and Invalid Generic Names in Zoology and asserting that there would be no need for this name, as he has done in his article 5, Hershkovitz himself calls for such confusion.

Dias de Avila-Pires (cited above) also disagrees with Morrison-Scott. But his real problem in doing so is not a nomenclatorial one but a problem of language. His statement: " To call a panther *Leo* is no more confusing than to call a lion, *Panthera* " seems to be a very unrealistic argument for rejecting a well established name in favour of another one which would be in no way better according to his own view.

In connection with this proposed preservation of *Panthera* Oken there is another problem. I have shown (Hemmer, l.c.) that the genus *Panthera* has to be subdivided into the two subgenera *Panthera* for lion, leopard and jaguar and *Tigris* for the tiger. The first mention of *Tigris* with generic meaning likewise dates from Oken, 1816, the second from Gray, 1862. As I have no firm intention of applying for a third name of Oken's to be validated, the International Commission for Zoological Nomenclature may decide which of these two names should be valid.

In conclusion, I support and renew Morrison-Scott's application for conservation of " *Panthera* Oken, 1816 " and request a decision on the author of the subgeneric name *Tigris*. The International Commission on Zoological Nomenclature is requested to take the following action:

to use its plenary powers:

(1) to validate the generic name *Panthera* Oken, 1816, as allowed by Opinion 417, and to designate *Felis pardus* L., 1758, as the type-species;

(2) to decide on the subgeneric name *Tigris* between the authors Oken, 1816, and Gray, 1862.

REPLY TO MAYR'S COMMENT ON THE PROPOSED PRESERVATION OF *PAN* FROM OKEN, 1816. Z.N.(S.) 482

By Philip Hershkovitz (*Field Museum of Natural History, Chicago, Illinois, U.S.A.*)

In his comment on preservation of *Pan* Oken, 1816, Professor Mayr (*Bull. zool. Nomencl.* **24** (2) : 66) declares, " to say as Hershkovitz does, that there is no need for stability for scientific names in this area because,"—then he goes on with a direct quotation from Hershkovitz (*Bull. zool. Nomencl.* **23** (2/3) : 68), italics mine—" ' *few anthropologists, primatologists, zookeepers, behaviorists, biomedical investigators and others using non-human primates in research* . . . , are zoologists ' is an argument the force of which I fail to understand."

In his statement, Mayr first attributes to me a conclusion of his own device and which is entirely alien to anything I said or implied. He then couples it with names of scientific professions I listed in a context diametrically opposed to his peculiar interpretation.

My original remarks, which Mayr obviously failed to understand, are clear and unequivocal exhortations to all who work with animals to seek stability of scientific names in harmony with the International Code of Zoological Nomenclature and Opinions of the International Commission on Zoological Nomenclature.

Pan, cited from " Oken, 1816 " (*Lehrbuch Naturgeschichte* . . . , usually without definite page reference) is invalid because the International Commission on Zoological Nomenclature rejected Oken's *Lehrbuch* for nomenclatorial purposes (Opinion 417, 1956). It has been shown that *Chimpansee* Voigt, 1831, is the oldest available name for the chimpanzee.

As explained in my comments, most users of *Pan* Oken, are not concerned or even aware of the status of the name. The vast majority tend to accept zoological names in good faith from secondary sources.

To my knowledge, no author of any taxonomic list or classification which includes *Pan*, and no proponent of the preservation of *Pan*, credit this generic name to a proper source or propose that it be preserved from a binomial author, and thus placed on the Official List of Generic Names in Zoology.

Perhaps Mayr, Morrison-Scott, and others favouring preservation of *Pan* from Oken, 1816, are more concerned with the validation of Oken's *Lehrbuch* than with a valid name for the chimpanzee. Surely, most opposition to the use of *Pan* would dissolve were this name cited from its first correct usuage for the chimpanzee, for example Palmer, 1904 (*Gen. Mamm.* : 508) and not from a zoologically dubious base and a nomenclatorially unacceptable work.

COMMENT ON THE PROPOSALS CONCERNING THE GENERIC NAMES *MEGALICHTHYS* AND *RHIZODUS* (PISCES). Z.N.(S.) 1690

(see volume 23, pages 117–120)

By E. I. White (*British Museum* (*Natural History*), *London*)

I agree entirely with Dr. Thomson's proposals, but the argument in favour of *Holoptychus nobilissimus* is incomplete as this species was originally described in 1835 as *Gyrolepis giganteus* L. Agassiz *Poiss. Foss.* **2** (1) : 175, pl. xix, fig. 13, and subsequently replaced in 1839 by *Holoptychus* (sic) *nobilissimus* L. Agassiz, in Murchison's *Silur. Syst.* : 600, pl. 11. bis., figs. 1, 2 (specific name *giganteus* withdrawn). The second action is illegal and must be properly put forward for the Commission to validate, particularly as the name *Holoptychius giganteus* was later used for another species (L. Agassiz, *Poiss. Foss.*, Vieux Grès Rouge, : 73, 140, pl. 24, figs. 3–10).

By Donald Baird (*Princeton University, New Jersey, U.S.A.*)

Let me voice strong support for K. S. Thomson's proposal to provide plenary sanction for the traditional application of the names *Megalichthys* and *Rhizodus* to the two most common crossopterygian fishes of the Carboniferous Period.

As Dr. Thomson justly points out, senseless confusion would result if the nearly universal usage of the past century were to be upset by nomenclatural pettifoggery.

His further proposal to validate current usage of the name *Holoptychius* is equally commendable. Confirmatory action by the Commission will be a boon to both specialist and non-specialist users of these generic names.

COMMENT ON THE PROPOSED SUPPRESSION OF *STRIX CAPENSIS* DAUDIN Z.N.(S.) 1692

(see volume 24, pages 34–35, 203–204)

By G. F. Mees (*Rijksmuseum van Natuurlijke Historie, Leiden, Netherlands*)

Though I am not really opposed to Clancey's proposal, the problem is more complicated than as presented by him, and for this reason I would consider it advisable to postpone a decision until the case has been thoroughly investigated.

Some comment is necessary regarding the replacement name if *Strix capensis* Smith is rejected as preoccupied. Roberts (1936), and Clancey (1967) accepted *Strix punctata* Lichtenstein (1854) as the next available name, but this name is a nomen nudum without nomenclatural significance. Probably this is the reason for Vincent's statement, quoted by Clancey, that: " *T. punctata* (Lichtenstein) does not replace *T. capensis* "; this statement is otherwise difficult to understand. As far as I have been able to ascertain, the name *Strix punctata* was validated by Gray (1869), whose citation shows that he used it as a substitute name for *Strix capensis* Smith. Though he does not expressly say so, it is evident that the substitution was made because Gray knew *Strix capensis* to be preoccupied. If *Strix capensis* Smith is rejected, the African Grass-Owl will therefore have to be called *Tyto punctata* (G. R. Gray, 1869). An advantage is that, as this name is solely based on plate 45 of Smith (1849), the type-locality of the species as accepted at present, remains the same.

Clancey's proposal makes sense from the purely African point of view, but it is impossible to judge it correctly without considering the Asiatic-Australian *Tyto longimembris* (Jerdon, 1839). In recent years there is a growing opinion that this bird is conspecific with *T. capensis* (Smith, 1834), an opinion to which I also incline. Whereas in Africa the species is not known to show geographical variation (four names: *Strix cabrae* Dubois, 1902; *Tyto capensis damarensis* Roberts, 1922; *T. c. libratus* Peters & Loveridge, 1935, and *T. c. cameroonensis* Serle, 1949, each based on a single individual only, are usually regarded as synonyms, cf. White, 1965), *T. longimembris* has, according to the latest revisers (Amadon 1959, Mees 1964) at least five races (if Australian *walleri* Diggles, 1866, is recognized, and *baliem* Ripley, 1964, based on one specimen compared with one skin of *papuensis*, is accepted, there are seven). With a range from India, China, and Formosa, to Victoria, New Caledonia and Fiji, *T. longimembris* is also the more widely distributed of the two. When therefore we do not restrict ourselves to Africa, but survey the species as a whole, acceptance of *punctata* as the valid name for the African subspecies will mean a change of a single name only, whereas conservation of *capensis* will result in a change of name of a widely distributed polytypic species. Though to nomenclatural discussion it is irrelevant whether a name is appropriate or not, the name *longimembris* describes excellently the most striking feature of the species, whereas combinations such as *Tyto capensis amauronota* and *Tyto capensis papuensis* for birds from the Philippines and New Guinea, though accepted by Amadon & Jewett (1946), Amadon (1959), and Ripley (1964), are less satisfactory. The specific name *Tyto longimembris* has been in general use since 1912. Rejection of *T. capensis* relieved me of the necessity of making changes in the established nomenclature of the Indo-Australian forms with which I was at the time concerned, and therefore was an obvious and logical course to take (Mees, 1964).

There is a second argument in favour of suppressing the name *T. capensis* (Smith). It is that Smith (1834) has described, besides this species, four other owls under the specific name of *capensis*, so that we get:

binomen as published:	present allocation:
Strix Capensis Smith	*Tyto capensis* (Smith)
Bubo Capensis Smith	*Bubo capensis* Smith
Noctua Capensis Smith	*Glaucidium capense* (Smith)
Otus Capensis Smith	*Asio capensis* (Smith)
Scops Capensis Smith	*Otus capensis* (Smith)

It will be seen that the name *capensis* Smith occurs in the Striges in no less than eight genera, seven of which are currently recognized. I find this confusing and believe that we could well do with one or two less.

If *Tyto capensis* (Smith) was the only name affected by Daudin's name, I would, on the basis of the arguments just given, favour a shift to *Tyto longimembris punctata* (G. R. Gray) for the African Grass-Owl. There is, however, another pertinent side to the problem not brought forward by Clancey: *Strix bubo capensis* Daudin is without the slightest doubt a *Bubo*, and therefore the name preoccupies not only in the genus *Strix*, but also in the genus *Bubo*, invalidating *Bubo capensis* Smith.

Presently I shall discuss the identity of *Strix bubo capensis* Daudin, but first attention must be drawn to further confusion caused by Smith when he christened five owls *capensis*. Sclater (1921) was the first to observe that *Otus capensis* (Smith) is a secondary homonym of *Otus capensis* Smith. At the time, both names were in use, one as *Asio capensis* (Smith), the other as *Otus capensis* (Smith), and Sclater, as first reviser and backed by page priority, decided to retain *Otus capensis* (Smith), and to synonymise *Asio capensis* (Smith). As the name for the polytypic species previously known as *Asio capensis*, he introduced *A. tingitanus* (Loche, 1867) (after the North-African race), and in the assumption that the South-African subspecies remained without a valid name, he proposed *Asio tingitanus andrewsmithi* to replace *Otus capensis* Smith. A few months later Stresemann (1922) pointed out the existence of an older name for the South-African subspecies: *Strix* (*Brachyotus*) *helvola* Lichtenstein, 1842. This second change was accepted by Sclater (1924).

In the meantime Hartert (1923) had argued the resurrection of *Asio capensis* (Smith):

" Zur Nomenklatur von *Asio capensis* haben sich W. Sclater, Stresemann und Rothschild geäussert. Die ersteren beiden Autoren verwerfen den Namen *capensis* für unsere *Asio*, weil Smiths *Scops capensis* in der heutigen Kombination *Otus capensis* heisst. Dies aber ist unlogisch. " *Otus Capensis* " Smith, die Ohreule, war ein bei seinem Erscheinen nicht vorweggenommener Name, der Name *capensis* muss daher für die kurzohrige Kapeule weiter angenommen werden und *Strix* (*Brachyotus*) *helvola* Licht. und " *Asio tingitanus andrewsmithi* " Sclater 1922 sind Synonyme von *Asio capensis capensis*. Dahingegen kann die südafrikanische Zwergohreule natürlich nicht *Otus capensis* genannt werden, da dieser Name 1834 vergeben wurde, sondern muss *Otus senegalensis latipennis* (Kaup, 1862) genannt werden. Vgl. Vög. pal. Fauna, p. 982."

Hartert therefore reversed Sclater's decision, accepted *Asio capensis* (Smith), and suppressed *Scops capensis* Smith in favour of the next oldest synonym, *Otus senegalensis latipennis* (Kaup). Hartert's authority was such that he has been universally followed, even by Sclater (1930) himself. Though Hartert certainly had an amount of logic on his side, I can find nothing in the Code (Stoll & al., 1961, art. 24) that would legalise this reversal of the decision taken by Sclater, who was the first reviser.

Mrs. Margaret Doyle has drawn my attention to the fact that as far as the secondary homonymy of *Otus capensis* Smith and *Scops capensis* Smith is concerned, neither name should ever have been changed, since the two species were not, and are not, considered congeneric (see Art. 59b—". . . by any zoologist who believes that the two species-group taxa in question are congeneric ").

We return now to *Strix bubo capensis* Daudin. The reason this name has been largely ignored was originally, as Clancey (1967) mentioned, because it was described as a variety and not as a species. Later Sundevall (1868), in his discussion of Levaillant's work, expressed the opinion that Levaillant's plate 40 does not depict an African owl at all, but is *Bubo bengalensis* (*Bubo bubo bengalensis* in modern nomenclature). Subsequently Sharpe (1875) remarked that the question was too obscure to admit of substituting *Strix bubo capensis* for the well-established name *bengalensis*, and this has been, as far as I could ascertain, the last word on the question.

Levaillant was notoriously unreliable, and the inference is that he might never have seen a *Bubo* in South Africa, and has put in a figure of *Bubo bubo bengalensis* to make his book more interesting. In this particular case I think that we do Levaillant an

La Tête et le Pied du Grand Duc
de Grandeur Naturelle
De Vesin, de la Rivière des Elephans
en Afrique

injustice by assuming intentional falsification. From the text it is quite clear that he regarded the European, the African and the American *Bubo* all as one species. As he only depicted " Le Grand Duc ", without reference to provenance, plate 40 may well represent a European bird. This does not therefore mean that Levaillant had not met with the African species, or was not in the possession of African specimens.

In Daudin's (1800) description of *Strix bubo capensis* a reference to Levaillant's plate 40 is included, but the description fits the African bird, and there is definite mention of a specimen found by Levaillant on the Elephant River.

I believe to have evidence that Levaillant actually possessed a specimen from the Elephant River. The copy of Levaillant's (1799) book in our museum is no. 1 of six autographed copies; it originates from the library of the well-known collector Joan Raye van Breukelerwaert. In this book, besides a black-and-white and a coloured printed copy of each plate, a number of original water colours are bound.

On the first page of this volume appears in ink the following note: " À cet Exemplaire choisi et retouché au pinceau sur plusieurs Oiseaux de mon Cabinet ont été ajoutés beaucoup de dessins Originaux des Têtes et pieds de grandeur naturelle des Oiseaux de Proye.—Raye de Breukelerwaert."

Bound next to plate 40 is a plate of a head and a claw inscribed: " La Tête et le Pied du Grand Duc de Grandeur Naturelle Des Bords de la Rivière des Elephans en Afrique ".

This bird is definitely not the same as the one depicted on plate 40, and appears to represent an African individual (as head and claw only are figured, and the best distinctive character is in the pattern of the breast, it is difficult to be sure). Many of the original drawings in the book bear the indication: " de mon Cabinet ", e.g. in the collection of Raye van Breukelerwaert, but not this one. That the specimen from which this drawing was taken was not in his collection is also clear from the fact that in the auction catalogue of his collection (Anon., 1827) no mention of it is made. It is likely therefore, that the specimen was in the collection of Levaillant, and Daudin had probably seen it there. Though the reference to Levaillant's plate 40 makes, strictly speaking, *Strix bubo capensis* a composite species, it is quite evident that Daudin intended to name the African species, and in agreement with the clear intention of its author, I make the specimen from Elephant River referred to by both Levaillant and Daudin, and after which the watercolour drawing hereby reproduced (plate 3) has been made, the lectotype of *Strix bubo capensis* Daudin. This makes the name a senior synonym of, hence the valid name for, the species at present known as *Bubo capensis* Smith.

Under the Code, and unless the International Commission rules otherwise, the nomenclature of the African owls under discussion stands as follows:

correct name:	name used previously:
Tyto longimembris punctata (G. R. Gray, 1869)	*Tyto capensis* (Smith, 1834)
Bubo capensis (Daudin, 1800)	*Bubo capensis* (Smith, 1834)
Asio capensis (Smith, 1834)	*Asio capensis* (Smith, 1834)
Otus capensis (Smith, 1834)	*Otus senegalensis latipennis* (Kaup, 1853)

Postscriptum. In the assumption that Daudin's name had been in disuse since 1875, I erred, for Neumann (1914, *J. f. Orn.* **62** : 35) argued in no unclear terms in favour of the name *Bubo capensis* (Daudin) for the African species: " Daudins kurze Beschreibung ist sehr treffend und kennzeichnet . . . nur den Kap-Vogel, nicht, wie Sundevall annimmt, den indischen *B. bengalensis*. Sundevalls Kritik . . . ist hier volkommen unberechtigt". The fact that I had originally overlooked this important reference strengthens my view given in the first paragraph of this comment, that the case must be thoroughly investigated before decisions are made. It is also significant that the leading South African ornithologists saw no objection to reproducing Levaillant's plate 40 as of a " Cape Eagle Owl " (1964, *Lantern* **14** : 19).

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WITHDRAWAL OF APPLICATION FOR SUPPRESSION OF THE MAMMALIAN NAME *DOUGLASII*, PUBLISHED AS *LEPUS DOUGLASII*. Z.N.(S.) 1696 (see volume 22, pages 190–191)

By Charles A. Long (*Department of Biology, Wisconsin State University, Stevens Point, Wisconsin, U.S.A.*)

The purposes of my application for suppression of *douglasii* Gray, 1837, published in the binomen *Lepus douglasii*, were (1) to bring this *nomen oblitum* to the attention of the International Commission, in accordance with the prescribed procedure in Article 23b of the International Code of Zoological Nomenclature; (2) to review the status of *douglasii* and refer it to the species *Sylvilagus aquaticus* (Bachman), 1837; (3) to mention a lack of " evidence, to my knowledge, showing that *douglasii* is younger than *aquaticus* "; and (4) to protect well-known *aquaticus* from the threat of *douglasii* by proposing suppression of the latter. The scholarly comment of Holthuis (*Bull. zool. Nomencl.* **22** (5/6) : 281, 1966) removes the third, for he found evidence that *aquaticus* is the senior name. Thus, the fourth purpose, which follows from the third, is hardly necessary now. I therefore request that my application be withdrawn from plenary consideration.

However, *douglasii* may yet prove to be the senior name or to be referable to a subspecies of *aquaticus*, namely *Sylvilagus aquaticus littoralis* Nelson, 1909. These potential problems are of no present consequence to nomenclature.

FURTHER COMMENT ON THE CASE OF *GRACILARIA* VERSUS *GRACILLARIA* (INSECTA, LEPIDOPTERA). Z.N.(S.) 1757

By Elwood C. Zimmerman (*Bishop Museum, Honolulu, Hawaii*) and N. D. Riley (*British Museum (Natural History), London*)

In *Bull. zool. Nomencl.* **24** (2) : 78–79, 1967, Whalley, *et al.*, and Common and Key have objected to our request (*Bull. zool. Nomencl.* **23** (4) : 186–187, 1966) to have the emended spelling *Gracilaria* accepted in place of the original form *Gracillaria* which various authorities have considered a mis-spelling. We wish to reply as follows:

Our opinion that *Gracillaria* is a mis-spelling remains unchanged. Whalley, *et al.*, state that we claim that an " incorrect latinization " is involved. In no place in our original document have we made such a statement. We cannot accept that an incorrect spelling is necessarily equivalent to an incorrect latinization. The name *Gracilaria* comes from the Latin *gracilis*, and it is not a latinization of a Greek word, for example.

Whalley, *et al.* say that there is no evidence for our opinion that Haworth mis-spelled *Gracilaria* as *Gracillaria*, because Haworth used the incorrect form several times in his original work. A mis-spelling is not made a correct spelling no matter how many times an author may use the word. Would our opponents consider the spelling *moniliferus* as *monilliferus* correct if an author used the incorrect spelling *monilliferus* six times or more in a publication? Is there a great difference between mis-spelling *Gracilaria* as *Gracillaria* and *moniliferus* as *monilliferus*? We have seen a recent large and important monograph by a distinguished professor in which " *sensus strictus* " is used consistently many times. Can we say that because he has used that erroneous spelling X number of times he has not mis-spelled the term? Whalley, *et al.*, have mis-spelled one of our names! If they repeated the mis-spelling six times, that would not make their spelling correct. The number of times an author uses a spelling cannot always be used as evidence of its correctness.

In response to our claim that confusion exists because of the existence in literature of two spellings for the generic name *Gracilaria* and *Gracillaria*, and two spellings for the family name, GRACILARIIDAE and GRACILLARIIDAE, Whalley, et al., say: " This is an exaggeration of the position. . . . No confusion has arisen as to what was intended with either spelling." This may be true for taxonomists familiar with the insects concerned, but certainly not for cataloguers, recorders, indexers and those of us who wish to see established a firm system of nomenclature—and the question at issue is nothing but a question of nomenclature. Both of us, and we are not alone, do in fact find the situation definitely confusing, and this is the sole reason for our application.

If we were to adhere to the strictest form of priority, then we would have further confusion with the generic name spelled *Gracillaria* and the family name spelled GRACILARIIDAE as originally formed. Surely, this would be not only confusing, but it would be wrong. We need stability in spelling. It should be noted that if the original incorrect spelling of the generic name is used, then the spelling of the name of the family should be changed (as Whalley, *et al.*, have requested of the Commission), but if the corrected spelling of the generic name is accepted the original spelling of the family name is retained.

The thoughtful comments of Common and Key are appended to the article by Whalley, *et al.* They say that " the family name GRACILLARIIDAE has been used consistently by the Zoological Record since 1949. . . ." We know that the usage by the Zoological Record during this period reflect the opinion of certain of the co-signatories of the article by Whalley who have acted as advisors to the abstractors for the Zoological Record and who wish to adhere almost invariably to original spellings and the strictest form of priority.

In our original appeal, we noted that when Zeller made the correction to *Gracilaria* in 1839, he did not make a separate statement saying, in effect, " I am correcting the mis-spelling *Gracillaria* to *Gracilaria* because . . ." Our opponents believe that he should have said that he was making a correction, but there was no Code in 1839 making such a statement mandatory. That he was making such a correction is to us self-evident. We believe that Zeller made a legitimate correction, and Meyrick, a teacher of classics, rightly followed suit.

In summary, we wish to say that we continue to believe that *Gracillaria* is a simple case of mis-spelling and thus is subject to correction under the provisions of the Code. As noted in our original document, we share the opinion of scholars who were well versed in the classics and who spelled the word correctly as *Gracilaria*.

COMMENT ON PROPOSALS FOR STABILIZATION OF THE NAMES OF CERTAIN GENERA AND SPECIES OF HOLOTHURIOIDEA. Z.N.(S.) 1782 (see volume 24, pages 98–115)

By Henning Lemche (*Universitetets Zoologiske Museum, Copenhagen, Denmark*)

Even for trained Commissioners it is often a hard job to find the winding path down to the firm bottom of intricate nomenclatorial problems. It would be a great help if all applicants would realise this fact and try to keep out of their applications everything not pertinent to the nomenclatorial problem to be discussed. Worst of all are those lengthy papers where nomenclatorial matters are mixed up with all kind of other things so that Commissioners are forced to read a whole systematic paper outside their own field in order to pick up those problems that may afford treatment. The B.Z.N. should not become a place for easy publication of systematic papers. The application by A. M. Clark and F. W. E. Rowe constitutes such a case, as I shall demonstrate in detail below. Also, their proposals are of the dangerous gross type that experience shows are apt to lead to confusion because each item tends to be shortened down too much, or to be too superficially handled. The applications by Hemming (published posthumously) that appeared in recent issues of this journal are examples of how such things should be handled, one by one, and separately. As a Commissioner, I am inclined to refuse voting on mixed applications of the type presented by Clark & Rowe.

(1) *Sporadipus*. Fully presented except that information on established practice is lacking.
(2) *Thelenota*. No information on the degree of usage of this name in the family STICHOPODIDAE.
(3) *Trepang*. Fully presented.
(4) *Microthele*. No case at all.
(5) *Stichopus*. No nomenclatorial problem concerning *Perideris*. The other half of the petition concerns the possible replacement by *Gymnochirota* Brandt of *Semperothuria* or *Mertensiothuria*, both of Deichmann, 1958. It is not explained how these latter names have already become so fully established that they warrant protection.
(6) *Ludwigothuria*. No case.
(7) *Bohadschia*. No case. (What is the intention of the bewildering reference to case no. 1)?
(8) and (9) No case. Even, *Mülleria* is not proposed for the Index.
(10) *Fistularia*. I fail to see any proposals concerning this name. No case.
(11) *Cystipus*. No proposals, no case.
(12) *Ananus*. A mere nomen dubium of no importance. No case.
(13) *Diploperideris*. as (12).
(14) *Eostichopus*. A nomen nudum, thus no case.
(15) *Cuvieria*. Preoccupied. No case.

(16) *Cladodactyla*. No case. The uncertainty may be set at rest some day, but anyhow there is no danger of confusion for the time being.
(17) and (18) *Thyonidium* and *Duasmodactyla*. A good case.
(19) *Dactylota*. No case.
(20) *Aspidochir*. A nomen dubium. No acute danger.
(21) *Liosoma*. A completely plain case of taxonomy, not of Nomenclature.
(22) *Oncinolabes*. As far as *mollis* is concerned, there might be a case here.
(23) *Tiedemannia*. A nomen dubium. No case.

As to the many specific names proposed for suppression, only

Holothuria glaberrima
Cladodactyla nigricans
Cuvieria Sitchaensis
Holothuria Drummondi
and *Holothuria pellucida*

seem to constitute cases worthy of consideration.
May I suggest that the items contained in the numbers
(generic part) 1), 2), 3), 5), 17 and 18), and 22) and
(specific part) 1), 14), 22), 27), 31), 32), 33)
be resubmitted individually for consideration.

ADDITIONAL COMMENT ON THE PROPOSED REJECTION OF *COLUBER CHIAMETLA* SHAW, 1802. Z.N.(S.) 1704

(see volume 22, pages 235–236, volume 24, page 138)

By Hobart M. Smith (*Department of Zoology, University of Illinois, Urbana, Illinois 61803, U.S.A.*)

The recommendation by Peters (1967, *Bull. zool. Nomencl.* **24** (3) : 138) that the petition for rejection of *Coluber chiametla* Shaw, 1802, suggests in general terms that the name *Drymobius margaritiferus* (Schlegel, 1837), which has been consistently used for this species for over a century, is not sufficiently widely used by non-herpetologists or even by herpetologists themselves to warrant use of the plenary powers of the Commission for its preservation. I wish merely to point out that I am aware of about 125 works, in the literature pertaining solely to Mexico and Guatemala. Since the species ranges from southern Texas to northern South America it is likely that at least twice as many references to the species occur in all literature as in the Mexican-Guatemalan component. These surely represent at least 200 different works. Some are popular, some strictly ecological, although most are taxonomic or distributional.

The species is perhaps the most common snake in lowland Mexico, is represented by large numbers in museums, is widely distributed, and is frequently exhibited in zoos. However as Peters points out it is not a species known in the non-herpetological literature except for a few ecological works.

COMMENT ON APPLICATION FOR USE OF PLENARY POWERS TO VALIDATE *STERNA TSCHEGRAVA* AND *MOTACILLA PLESCHANKA* LEPECHIN, 1770. Z.N.(S.) 1784

(see volume 24, pages 60–62, 204–205)

By Standing Committee on Ornithological Nomenclature of the International Ornithological Congress

An application is before the International Commission for exercise of the plenary powers to validate the two Lepechin names and to suppress and invalidate the two Pallas names applicable to the same species, all published in the same volume, *Novi Commentarii Acad. Sci. Petropolitanae*, vol. 14, pt. 1, bearing date on its title page, 1770. Pallas' names were adopted by Gmelin, as first reviser in 1789 (" 1788 " *Systema Naturae*, **1** (2) : 603–604, 974), citing Lepechin's names in synonymy. Pallas' names have been in regular use at all times since. The availability of Pallas' names is unquestioned, and under the Code their validity as the legal names of the two species seems to us not in doubt. Lepechin's names were revived by some upholders of page anteriority, after over a century of non-use, but were then rejected, even by many authors who did not recognize the first reviser principle, on the ground that his paper was not binominal. Nevertheless the fact remains that there is a substantial conflict of current usage requiring resolution by a decision of the International Commission.

The applicants have expressly requested that the International Commission consider separately the status of the names of the two species, the Caspian Tern and the Pied Wheatear. While the technical situation under the rules of nomenclature is the same, the matter of usage is different and this may be pertinent on the question of suspension of the rules under the plenary powers. Hence we follow the applicants' request in our discussion, after treating the basic situation common to both.

Because of its bearing on usage, the distribution of the birds has pertinence. The Caspian Tern (in French " Sterne caspienne ")—*Sterna caspia* Pallas, *S. tschegrava* Lepechin—is a large, well-known, virtually cosmopolitan, monotypic species; it breeds in temperate North America, and in parts of Eurasia, Africa, Australia and New Zealand; it winters into the tropics.

The Pied Wheatear (in French " Traquet pie ")—*Motacilla leucomela* Pallas, *M. pleschanka* Lepechin—is a small bird of restricted Palearctic distribution; as a breeder it is almost confined to the U.S.S.R., eastern Rumania, Iran and Afghanistan, with an isolated subspecies in Cyprus; in winter it occurs in north-eastern Africa and parts of southern Asia; in Western Europe it is little more than an occasional wanderer.

Interest in the specific names of the Caspian Tern is thus cosmopolitan and the literature very great; interest in the names of the Pied Wheatear distinctly limited. Currently the tern is placed in the genus *Hydroprogne*, the wheatear in the genus *Oenanthe*.

Publication

Both pairs of names were published at the same time in one volume, dated 1770 on the title page, containing a number of articles by different members of the St. Petersburg Academy of Sciences. Lepechin's paper has page anteriority, and, the applicants point out, below the title of his paper there is indication that the paper was presented (" exhibit ") to the Academy on March 15, 1770, which is just about a month before the similarly indicated presentation date of Pallas' paper. But this has no significance, for under the Code it is *publication* date, not date of presentation of a manuscript, or reading, that controls (Code, Arts. 8 and 9). Applicants say that the volume may not have appeared until " possibly " in 1771, but even if true, that has no relevance, as the date would equally apply to both included papers. The applicants admit that " it is not known " whether either of the two papers was separately published and distributed on different dates before the volume appeared.

Moreover, under Code Art. 21(a) the date of publication specified in the work is to be accepted, in the absence of proof to the contrary. Here there is no scintilla of evidence produced to suggest separate prior publication in parts. The internal evidence from examination of the volume suggests continuous printing. The various articles are not only paged continuously, but printed on the same sheets as preceding articles; further (according to printing practice of that period) at the end of each page is printed the first syllable of the first word of the next page, even when that page begins a new article. Publication of the included articles on one date must therefore be presumed.

The first reviser rule, Code Art. 24(a)

The Code makes it plain that in a situation of contemporaneous publication the selection of the first reviser controls. This conservative rule, (also enunciated in the old Règles, Art. 28), tends to maintain usage. Gmelin (*Systema Naturae* **1** (2) : 603–604, 974, " 1788 " [1789]) plainly acted as first reviser, selecting Pallas' names *Sterna caspia* and *Motacilla leucomela* respectively, while citing under each species in the synonymy both Pallas' and Lepechin's papers and names. For about a century thereafter Lepechin's names were ignored; Pallas' *caspia* was universally employed for the tern; his *leucomela* had constant use but competed with other names, in part because unrecognized polymorphism had resulted in new names for the same species.

Towards the end of the 19th century advocates of " strict priority " resurrected Lepechin's names on the theory of " page anteriority ",—a doctrine which, for a time, had considerable currency, particularly with some ornithologists. The applicants mention three distinguished ornithologists, Hartert, Peters, and Hellmayr, who in important works, *prior to the adoption of the Code*, accepted *Sterna tschegrava* of Lepechin. What is not mentioned is that these authors were self-avowed strict priorists who rejected the first reviser rule of the Règles and of the present Code.*

As will be pointed out below, even most ornithologists who advocated " strict priority " nevertheless rejected Lepechin's names because his paper was clearly not in accord with the principles of Linnaean binominalism.

Consistent binominalism, Code Art. 11(c)

Article 11(c) is clear that for a species-group name to qualify as available " The author must have consistently applied the principles of binominal nomenclature in the work in which the name is published ". The requirement of consistent Linnaean binominalism was implicit in the Règles, Art. 25b.†

The applicants concede that Lepechin's paper is not consistently binominal. What we have here is not a mere occasional deviation from consistency, but rather a failure to accept Linnaean binominalism altogether.

Lepechin's paper, entitled " Descriptio quorandum animalium ", describes only six species. Three are given " names " that are the usual pre-Linnaean polynominal diagnoses; e.g., 1, " Parus dorso dilute caeruleo . . ." etc.; 3, " Tringa inferne alba, supra . . . " etc.; 6, " Mus oculis minutissimis auriculis caudaque nullis . . ." etc. In the cases of *Sterna tschegrava* and *Motacilla pleschanka* the second word is the spelling

* Hartert, *Die Vögel der paläarktischen Fauna* **1** : ix, 1912, states that he was a radical in nomenclature, adhering to the strictest priority, even to maintaining the original gender ending of adjectival specific names after removal to a different genus; in adopting *tschegrava* (vol. 2, p. 1692, footnote, 1921), he plainly indicated his rejection also of the principle of consistent binominalism. Peters, *Check-list of Birds of the World* **1** : vii, 1931, expressly stated that he rejected the first reviser rule, Art. 28 of the Règles, and instead adhered to the doctrine of page and line anteriority. Hellmayr in *Catalogue of Birds of the Americas* did not follow the Règles; not only was he a " strict priorist " but he treated as homonyms generic names that differed only in one letter.

† We mention this to show that the Code provision only made more explicit what most zoologists considered the sound established doctrine. The Code provisions are, of course, retrospective (Art. 86).

in Latin letters of the Russian vernacular (given in Cyrillic before the diagnosis continues). Even pre-Linnaean authors occasionally included two-word names. Obviously this paper does not adhere to " binomial " principles—to use the customary pre-Code terminology.

The suggestion is advanced that these two names may be saved by subdivision (ii) of the same Article 11(c), which provides that in pre-1931 publications, when the body of the work is not binominal, names published " in the index " may be available " *if* they satisfy the relevant provisions of this Article ", and other provisions. This clause was designed, we believe, to cover certain early publications which appended to a non-binominal text an index designed to conform with the Linnaean system. The binominalism of the index is to be tested as if it were an independent work, but so judged the index itself must comply with Article 11(c) and be consistently binominal. Lepechin's names are not saved by this clause, for: (a) His names do not appear in any index to the volume, the only " Index " being of authors and Article titles. What the applicants would treat as an index is the anonymous " Summarium " at the start of the volume, which is not an index either in substance or in form. It is a textual summary of the various included papers, written in continuous sentence (not tabular) form. (b) The " Summarium " so far a it relates to Lepechin's names does not comply with the requirement of consiste . binominalism of Article 11(c), any more than does the text; it merely repeats the same polynominal name diagnoses as the main text.

The rejection of Lepechin's names for non-binominalism is nothing novel. Since Gmelin his names have appeared in synonymy. When towards the end of the 19th century advocates of page anteriority resurrected Lepechin's names (perhaps relying only on the synonymies), subsequent examination of his paper immediately revealed that he " was not consistently binomial ". The first edition of the American Ornithologists' Union *Check-list of North American Birds* (1886) is the earliest publication we have found adopting *Sterna tschegrava*; but after published protest from the leading American ornithologist of the period, E. Coues, and an examination of the paper, the A.O.U. Committee in 1899, " Ninth Supplement to the Check-list " (*Auk*, **16** : 99) reverted to the long-used name *caspia*, pointing out that Lepechin's paper " was not binomial " and that the first subsequent author had adopted Pallas' *caspia*,—a name preserved in all subsequent editions of the *A.O.U. Check-list of North American Birds* (not merely in the last two, as incorrectly stated by the applicants). The most important ornithological work of this period, the tremendous multi-volume *Catalogue of Birds in the British Museum* (which described every known species), retained *caspia*, even while citing Lepechin's name in its elaborate synonymy (vol. 25, p. 32, 1896). Numerous works establishing regional ornithological nomenclature point out the invalidity for lack of consistent " binomialism " of Lepechin's names—long before the Code (e.g., Ridgway, *Birds of North and Middle America* (8): 465 footnote, 1919; R.A.O.U. *Official Check-list of Birds of Australia* : 19 footnote, 1926; Witherby et al. *Handbook of British Birds* **5** : 15, 1941).

Usage

As to usage there is a difference in regard to the Caspian Tern and the Pied Wheatear—probably because of the relatively restricted range of the latter, so we shall treat them separately.

1. Usage as to the Caspian Tern

For more than a century between 1770 and the late 19th century Lepechin's name seems never to have been adopted, and Pallas' name *caspia* was universally used, judging by the extensive bibliographies in *Catalogue of Birds in the British Museum* **25** : 32 et seq., 1896, and Ridgway, *Birds of North and Middle America* (8) : 463 et seq., 1919. The name *caspia* has continued to be used in most of the literature at all times since.

When the strict priorists revived *tschegrava* on the basis of page anteriority, even during the short period of acceptance by the American Ornithologists' Union most North American ornithologists continued to use Pallas' *caspia*; and even those few like Ridgway who had briefly used Lepechin's name reverted to that of Pallas (see Ridgway, *op. cit. supra* : 465 footnote, 1919). The same was true of the British Mathews, who in 1912 had used *tschegrava*, and later reverted to *caspia* (in *Systema Avium Australasianarum*, 1927–1930).

The fact that the prestigious *Catalogue of Birds in the British Museum* **25**, 1896 continued to use *caspia*, despite the attempted revival of Lepechin's name, no doubt played a part in preserving Pallas' name against the assault of the page anteriorists.

The adoption of the Règles should have put an end to any dispute on this point. However not all ornithologists adhered to the new rules. It was Hartert (*op. cit. supra*, 1921) who was responsible for the revival of *tschegrava* in eastern Europe. He disagreed with the provisions of the Règles (without mentioning them) as to first reviser and consistent binominalism. Hellmayr and Peters, also strict priorists (see footnote *supra*), took the same view. Despite the merited taxonomic reputation of these three authors, it is significant that their following on the nomenclature of the Caspian Tern has been very limited. Authors writing on the ornithology of the Western Hemisphere invariably use *caspia*, and since the species is well-known and widely distributed the American literature is enormous.

This is true not only in the vast ornithological literature of the United States which follows the *A.O.U. Check-list of North American Birds*, but that of Canada (Godfrey, *The Birds of Canada*, 1966), of the West Indies (Bond, *Birds of the West Indies*, 1961), Middle America (e.g. Miller et al. *Check-list of Birds of Mexico*, 1950–1957, and all others), South America (e.g. de Schauensee, *The Species of Birds of South America*, 1966). In Africa almost all the literature, current as well as older, uses *caspia*, and this applies not only to British authors, whose books and papers are most numerous, (e.g. Sclater, *Systema Avium Aethiopicarum*, 1924–1930), but to French ones (e.g. Heim de Balsac and Mayaud, *Les Oiseaux du Nord-Ouest de l'Afrique*, p. 152; Etchécopar and Hüe, *Les Oiseaux du Nord de l'Afrique*, 1964). The current literature for Asia, largely by British authors, of course, predominantly uses *caspia*; but again this is not limited to British ornithologists, for the same usage is adopted in Ripley's very important *Synopsis of the Birds of India and Pakistan*, 1961, and in Delacour and Mayr, *Birds of the Philippines*, 1946. As noted earlier, *caspia* is the name used in the literature of Australasia.

In Europe there is current conflict of usage. Prior to Hartert, even in Russia Pallas' name *caspia* was generally used (e.g. Zarudny, *Ptitsy Pskov* : 57, 1910). But Hartert's nomenclature has had a wide following in Germany and eastern Europe. However, this has not been unanimous, for we find E. Schütz, *Die Vogelwelt des Südkaspischen Tieflandes* : 79, 109, 1959 and A. Keve, *Nomenclator Avium Hungriae* : 46, 65, 1960, rejecting Lepechin's names and adopting those of Pallas.

For the countries of western Europe, although usage is not unanimous, the major current systematic or zoogeographic works and handbooks for Britain, France, Spain, the Netherlands, Denmark and Finland use Pallas' name *caspia*.

Therefore, Vaurie's adoption of *tschegrava* in 1965, (*The Birds of the Palearctic Fauna* : *Non Passeriformes*), in the face of the provisions of the Code, brought the controversy to a head (Amadon, 1966, *Ibis*, **108** : 424). This protest caused Vaurie and his associates to make the application so that the International Commission might settle the question.

It seems to us that current usage, whether one applies a criterion of authors or geographic distribution, plainly supports the long established name *caspia*.

However, the applicants express the opinion that current " usage is perhaps about equally divided on a world-wide basis ". Even if this were so, we can see no advantage or justification for exercising the plenary powers to reject the familiar, legally valid, name in favour of an invalid name lacking preponderance of usage, either current or former.

2. Usage as to the Pied Wheatear

The literature is much more limited, for unlike the cosmopolitan Caspian Tern, the Pied Wheatear has a breeding range mainly restricted to the U.S.S.R. (plus certain areas where ornithologists are few or non-existent). Unlike *caspia* for the tern, the name *leucomela* has never had overwhelming currency. *Pleschanka*, to be sure, was practically unused until near the end of the 19th century, but strongly competing with *leucomela* during that century was another (junior) name, *morio*, of Hemprich and Ehrenberg (1833, *Symb. Phys. Aves* **1**, fol. aa). The latter name was adopted by the very influential *Catalogue of Birds in the British Museum* **25** : 32, 1881, although both *leucomela* and *pleschanka* were cited in synonymy.

The real currency of *pleschanka* followed its adoption by Hartert (1921), in *Die Vögel der paläarktischen Fauna*. Added support came from Vaurie's important *Birds of the Palearctic Fauna Passeriformes* 1959, which has been followed in this respect by a number of others. Russian authors today uniformly employ *pleschanka*. Most current works by British authors, dealing with the bird in its winter or accidental range, or as a breeder in Cyprus, use *leucomela*. So do several other European authors (Voous, *Atlas of European Birds*, 1960).

Some authors who use *caspia* Pallas for the tern, nevertheless, in the same work, use *pleschanka* Lepechin for the wheatear; e.g., Ripley, *Synopsis of the Birds of India and Pakistan*, 1961; Etchécopar and Hüe, *Les Oiseaux du Nord de l'Afrique*, 1964. Whether these authors decided to accept Russian preference in regard to a mainly Russian breeding bird, or whether they simply followed Vaurie as the latest work, we do not know. Further, in the recent, (1964), volume 10 of *Check-list of Birds of the World* (dealing with Turdinae) Ripley continues to use *pleschanka* (though, as pointed out, *caspia* is used by him for the tern). These recent publications probably will increase the use of *pleschanka*.

Recommendations

When current usage is strongly divided the major consideration is to find a solution that will have the widest (and, hopefully, universal) acceptance. In the case of such conflict in the name of a taxon of cosmopolitan distribution, (absent any element of confusion), applying the Code provisions is usually the most acceptable procedure. On the other hand, where a taxon is of restricted breeding range in an area with many interested zoologists who uniformly use a particular name, their usage and preference are entitled to considerable weight, and may justify suspension of the rules by exercise of the plenary powers.

These factors lead the Standing Committee on Ornithological Nomenclature to recommend that the two cases be treated differently, despite their technical similarity, and to suggest that the International Commission:

(1) Make a declaration holding that the valid specific name of the Caspian Tern is *caspia* Pallas, 1770, as originally published in the binomen *Sterna caspia*, and that such name be placed on the Official List of Specific Names in Zoology; that the name *tschegrava* Lepechin, 1770, originally published as *Sterna tschegrava*, be rejected, be placed on the Official Index of Invalid and Rejected Names in Zoology, and be suppressed for purposes of the Law of Priority but not for purposes of the Law of Homonymy.

(2) Exercise the plenary powers to validate as the specific name of the Pied Wheatear the name *pleschanka* Lepechin, 1770, originally published as *Motacilla pleschanka*, and that such name be placed on the Official List of Specific Names in Zoology; that the name *leucomela* Pallas, 1770, as published in the binomen *Motacilla leucomela*, be suppressed for purposes of the Law of Priority but not for purposes of the Law of Homonymy.

Dr. Charles Vaurie, because he was one of the applicants, withdrew from any participation in the discussion or voting of the Standing Committee on Ornithological Nomenclature, or in the preparation of this report. The Committee is, however, of the opinion and has reason to believe that the applicants would find the compromise recommendation here submitted to be acceptable—if adopted by the International Commission.

Respectfully submitted,

Standing Committee on Ornithological Nomenclature of the International Ornithological Congress.

F. Salomonsen, Zoologiske Museum, Copenhagen, Denmark
Chairman, *pro tempore*,

E. Eisenmann, American Museum of Natural History, New York, U.S.A.

K. H. Voous, Zoologisch Museum, Amsterdam, The Netherlands.

COMMENT ON THE REQUEST FOR A DECLARATION AGAINST THE SUPPRESSION OF NOMINA DUBIA. Z.N.(S.) 1714

(see vol. 22, pages 265–266, vol. 23, pages 11–12, vol. 24, page 73)

By Henning Lemche (*Universitetets Zoologiske Museum, Copenhagen, Denmark*)

The comment published by Commissioner Sabrosky (B.Z.N. 24 : 73) on the possible paragraph (iv) of Article 79a gives quite a good formulation which I should like to propose altered only in a single point. A name that remains a nomen dubium may still become a danger to stability if some zoologist accepts it tentatively even without properly " discovering its identity ". So, I would feel that—if and when we are going to revise the Code once more—the proposal by Commissioner Sabrosky might be accepted without these words " if its identity is ever discovered ".

To me, it seems enough if the paragraph runs simply:

" A name that is a *nomen dubium* is not to be suppressed for that reason alone "—possibly with the addition of " but it may become so if it is found to constitute a real disturbance to stability or universality of names ".

COMMENT ON THE PROPOSED DESIGNATION OF A TYPE-SPECIES FOR *PATANGA* UVAROV, 1923. Z.N.(S.) 1761

(see volume 23, pages 235–238, volume 24, pages 130–137)

By Ernst Mayr (*Museum of Comparative Zoology, Harvard University, Cambridge, Mass., U.S.A.*)

It seems to me that this application clearly violates Article 75. As Lindroth, Ramsbottom, Svenson, Cain and other Linnaean specialists have pointed out repeatedly, Linnaeus did not have the modern concept of type specimens as name bearers. Mr. Dirsh acknowledges this by designating the specimen of " succinctus " as neotype. By this action Dirsh violates two provisions of Article 75. This neotype designation is not " necessary in the interest of stability of nomenclature " (75a) because in the present case it leads precisely to utter confusion. Since 1923 the name *succinctus* has been used for a typical species of *Patanga* and indeed *succinctus*, as misidentified by Uvarov, was made the type-species of *Patanga*. Dirsh's action would lead to a complete shifting of names. Indeed Dirsh proposes to make *succinctus* the type of the genus *Valanga*, etc. Dirsh's neotype transfers the name *succinctus* to a species for which this " name is not in general use either as a valid name or as a synonym " (thus violating Art. 75b).

In order to avoid these confusing transfers of names and to obviate a neotype selection in conflict with the provisions of Article 75 I herewith propose that Dirsh's neotype selection is declared as invalid and that the Commission set aside all previous designations for the species *succinctus* and designate as neotype the specimen selected by Dirsh as the neotype of *assectator*.

An equally acceptable solution would be to suppress the name *succinctus*.

COMMENT ON THE PROPOSED VALIDATION OF THE SPELLING *POLYXENUS* FOR *POLLYXENUS* LATREILLE. Z.N.(S.) 1785

(see vol. 24, pages 63–64)

By C. A. W. Jeekel (*Zoölogisch Museum, Amsterdam, The Netherlands*)

The proposal by Kraus contains a number of unsatisfactory points which deserve further consideration.

Kraus's par. 1. The importance of the name in general zoological literature seems somewhat overstated. In the taxonomic literature on Diplopoda the small subclass Pselaphognatha has been long neglected. Only since about 1950 has its study become more intensive, in particular through the work of Condé and associates. The genus *Pollyxenus* is apparently only a small one, and only one species, *Pollyxenus lagurus* (L.), which is widely distributed throughout Europe, has been cited more frequently in the European faunistic literature on Diplopoda. As an easily obtainable representative of its subclass the species has been the object of a few morphological, anatomical and ecological studies. Lacking, however, any economic significance it has been scarcely ever cited in applied zoological literature.

To validate the unfortunately uncritically accepted, but wholly unjustified emendation by Latzel, 1884, seems to me to be an unnecessary violation of the law of priority according to which *Polyxenus* Latzel, 1884, is a junior objective synonym of *Pollyxenus* Latreille, [1802–1803]. In my opinion such a validation undermines one of the basic principles of the Code in a case wherein by simple application of the articles a minor error in the spelling of a name can be easily corrected. In the interest of the general utility of the Code to solve quickly simple matters of priority, I feel obliged to oppose Kraus's proposal.

Kraus's par. 4. For the family name POLYXENIDAE, Kraus cites Gray & Jones as authors and 1842 as year of publication. In the literature on Diplopoda there has been some confusion regarding the question who should be regarded as the author of the names used for the first time in the article " Myriapoda ", in R. Todd (ed.), *The Cyclopaedia of Anatomy and Physiology*, Vol. 3. In this article the author mentioned after the new generic names is Gray. No personal name, however, is cited after the family names. In subsequent writings most diplopodologists have cited Gray as author of the generic names, and this is also done by Neave in the *Nomenclator Zoologicus*. Few writers have ever cited the author of the family names POLLYXENIDAE and POLYXENIDAE. Apparently Kraus has based himself in this respect on Latzel, 1884 (*Die Myriopoden der öster-reichisch-ungarischen Monarchie* **2** : 70), who cited Gray & Jones, and who has been followed subsequently by Silvestri, 1896 (*Annali Mus. civ. Stor. nat. Genova* **36** : 143), and Schubart, 1934 (*Die Tierwelt Deutschlands* **28** : 20). Unfortunately, I have no personal access to the entire article " Myriapoda " in Todd's *Cyclopaedia*. As regards the authorship of the family names I have relied on a note by Cook, 1895 (*Am. Nat.* **29** : 863, footnote 4), who stated: " The family ' Craspedosomadae ' was published by J. E. Gray in the article on Myriapoda by T. Rymer Jones, in Todd's Cyc. Anat. and Physiol., III, p. 546 (1842). The author of the article specifically states that the arrangement of the Myriapoda there proposed was the work of Gray, published from his manuscripts and with his consent. Hence there is no apparent reason for citing the authority of Jones as Latzel and others have done." Therefore, the correct citation of the new names in Todd's *Cyclopaedia* seems to be: Gray apud Jones, in Todd, etc.

The citation of POLYXENIDAE in Todd's *Cyclopaedia* I regard as the first, and unfortunately mis-spelled, latinization of the family name Pollyxénites Lucas, 1840. It is clear that, since Latzel, 1884, is the author of the name *Polyxenus*, he is likewise the author of the emended family name *Polyxenidae*.

As year of publication of Todd's *Cyclopaedia*, Vol. 3, authors have cited either 1842 or 1843. In this respect I have followed the authority of Neave, *Nomenclator Zoologicus*, who gives (1843) as year for the generic names.

Kraus correctly mentions the family-name Pollyxénites of Lucas, but erroneously gives the year of publication as 1842. Actually, however, Lucas, *Histoire naturelle des Crustacés, des Arachnides et des Myriapodes*, was first published in 1840. Kraus suggests that the name Pollyxénites was a mere generic plural, but this is not correct as Lucas proposed the name as " Première Famille/Pollyxénites/Nobis."

It seems to me that the proposal by Lucas fully satisfies the provisions of the Code, and specifically of article 11(e)(iii), since Gervais, 1844 (*Annls. Sci. nat.*, Zool (3) **2** : 60) mentioned Lucas's Pollyxénites as the first synonym under the family name *Pollyxenidae*. The fact that the authorship of Lucas, or the year of publication 1840, have not been generally adopted is hardly of any significance in the present case, as the family name has been practically always quoted without author and year. Moreover, the authorship of the name and the year of publication of Todd's *Cyclopaedia* apparently have been generally wrongly cited.

Kraus's par. 5. In view of the above considerations the International Commission is asked:

(1) to place the generic name *Pollyxenus* Latreille, [1802–1803] (*Histoire nat. Crust. Ins.* **3** : 45), gender : masculine, type-species by monotypy, *Scolopendra lagura* Linnaeus, 1758, on the Official List of Generic Names in Zoology;

(2) to place the specific name *lagura* Linnaeus, 1758 (*Syst. Nat.* (ed. 10) **1** : 637), as published in the binomen *Scolopendra lagura*, on the Official List of Specific Names in Zoology;

(3) to place the family name *Pollyxénites* Lucas, 1840 (*Hist. nat. Crust., Arachn. Myriap.* : 518), first, incorrect, latinization: POLYXENIDAE Gray apud Jones, 1843 (in: Todd (ed.), *The Cyclopaedia of Anatomy and Physiology* **3** : 546), first correct latinization: POLLYXENIDAE Gervais, 1844 (*Annls Sci. nat.*, Zool. (3) **2** : 60), on the Official List of Family-Group Names in Zoology;

(4) to place the generic name *Polyxenus* Latzel, 1884 (*Die Myriopoden der österreichisch-ungarischen Monarchie* **2** : 70), an unjustified emendation of *Pollyxenus* Latreille, [1802–1803], on the Official Index of Generic Names in Zoology;

(5) to place the family name POLYXENIDAE Latzel, 1884 (l.c.), an unjustified emendation of POLLYXENIDAE Lucas, 1840, on the Official Index of Family-Group Names in Zoology.

OPINION 829

PAPIAS GODMAN, [1900] (INSECTA, LEPIDOPTERA): DESIGNATION OF A TYPE-SPECIES UNDER THE PLENARY POWERS

RULING.—(1) Under the plenary powers all designations of type-species for the nominal genus *Papias* Godman, [1900], made prior to the present Ruling are hereby set aside, and the nominal species *Pamphila integra* Mabille, 1891, is hereby designated to be the type-species of that genus.

(2) The generic name *Papias* Godman, [1900] (gender : masculine), type-species, by designation under the plenary powers in (1) above, *Pamphila integra* Mabille, 1891, is hereby placed on the Official List of Generic Names in Zoology with the Name Number 1770.

(3) The specific name *integra* Mabille, 1891, as published in the binomen *Pamphila integra* (type-species of *Papias* Godman, [1900]) is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2213.

HISTORY OF THE CASE (Z.N.(S.) 1682)

The present case was received as one of fourteen prepared by the late Mr. Francis Hemming. The application was sent to the printer on 4 December 1964 and was published on 5 April 1965 in *Bull. zool. Nomencl.* **22** : 77. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184) and to eight entomological serials. No comment was received.

DECISION OF THE COMMISSION

On 19 April 1967 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (67)20 either for or against the proposals relating to *Papias* Godman set out in *Bull. zool. Nomencl.* **22** : 77. At the close of the prescribed voting period on 19 July 1967 the state of the voting was as follows:

Affirmative votes—twenty-one (21), received in the following order: China, Vokes, Mayr, Sabrosky, Alvarado, Boschma, Obruchev, Binder, Holthuis, Uchida, Munroe, Lemche, do Amaral, Tortonese, Forest, Stoll, Mertens, Kraus, Bonnet, Ride, Evans.

Negative votes—none (0).

Voting Papers not returned—two (2): Hubbs, Simpson.

Commissioners Jaczewski and Brinck returned late affirmative votes.

Original References

The following are the original references for names placed on Official Lists by the Ruling given in the present Opinion:

integra, Pamphila, Mabille, 1891, *Bull. C. R. Soc. ent. Belg.* **35** : clxix

Papias Godman, [1900], *in* Godman & Salvin, *Biol. centr.-amer.*, Lep. Rhop. **2** : 559.

CERTIFICATE

I certify that the votes cast on Voting Paper (67)20 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 829.

W. E. CHINA
Acting Secretary
International Commission on Zoological Nomenclature
London
3 *August* 1967

COMMENT ON THE PROPOSED DECISION ON THE VALIDITY OF *DIDERMOCERUS* BROOKES, 1828 (MAMMALIA). Z.N.(S.) 1779

(see volume 24, pages 55–56)

By Colin P. Groves (*Department of Anthropology, University of California, Berkeley, Calif., U.S.A.*)

In a paper on the Sumatran rhinoceros (Groves, 1965, *Säugetierk. Mitt.* **13** : 128–131) I used the generic name *Didermocerus* Brookes, 1828, for this species, following Ellerman & Morrison-Scott. However since then a study of numerous papers on fossil rhinoceroses of Europe and Asia has convinced me that to continue to use *Didermocerus* would result in considerable hardship. No palaeontologist uses Brookes's name for the extinct forms related to the Sumatran rhinoceros; all of them use *Dicerorhinus* Gloger, 1842, and so do many neozoologists in speaking of the Sumatran rhinoceros itself. Accordingly, since *Didermocerus* has not gained anything like universal currency in spite of Ellerman and Morrison-Scott, I have reverted to *Dicerorhinus* in my latest paper (forthcoming in *Säugetierk. Mitt.*).

The question of the validity of Brookes, 1828, has a bearing also on the question of the generic name of the chimpanzee. If *Pan* Oken, 1816, is not validated for the chimpanzee, the name for consideration is Brookes's *Theranthropus*. Whatever the comparative merits of *Pan* and *Chimpansee*, I think it will be agreed that *Theranthropus* is not a desirable substitute. The only problem in suppressing Brookes's work entirely would be the name for the cheetah, *Acinonyx*, which could be validated by plenary powers at the same time as Brookes's catalogue is suppressed.

I would therefore strongly support Alternative B—to reject Brookes, to place *Dicerorhinus* on the Official List of Generic Names, and to place *Didermocerus* on the Official List of Rejected and Invalid Names.

OPINION 830

PHANIS GODMAN, [1900], AND *PHANES* GODMAN, [1901] (INSECTA, LEPIDOPTERA): DESIGNATION OF A TYPE-SPECIES UNDER THE PLENARY POWERS

RULING.—(1) Under the plenary powers all designations of type-species for the nominal genus *Phanis* Godman, [1900], and its replacement genus *Phanes* Godman, [1901], made prior to the present Ruling are hereby set aside and the nominal species *Thracides aletes* Geyer, [1832], is hereby designated to be the type-species of those genera.

(2) The generic name *Phanes* Godman, [1901] (gender : masculine), type-species, by designation under the plenary powers in (1) above, *Thracides aletes* Geyer, [1832], is hereby placed on the Official List of Generic Names in Zoology with the Name Number 1771.

(3) The specific name *aletes* Geyer, [1832], as published in the binomen *Thracides aletes* (type-species of *Phanes* Godman, [1901]) is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2214.

(4) The generic name *Phanis* Godman, [1900] (a junior homonym of *Phanis* Fairmaire, 1893) is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology with the Name Number 1914.

HISTORY OF THE CASE (Z.N.(S.) 1683)

The present case was received as one of fourteen prepared by the late Mr. Francis Hemming. The application was sent to the printer on 4 December 1964 and was published on 5 April 1965 in *Bull. zool. Nomencl.* **22** : 78. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184) and to eight entomological serials. No comment was received.

DECISION OF THE COMMISSION

On 19 April 1967 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (67)21 either for or against the proposals set out in *Bull. zool. Nomencl.* **22** : 78. At the close of the prescribed voting period on 19 July 1967 the state of the voting was as follows:

Affirmative votes—twenty-one (21), received in the following order: China, Vokes, Mayr, Sabrosky, Alvarado, Boschma, Obruchev, Binder, Holthuis, Uchida, Munroe, Lemche, do Amaral, Tortonese, Forest, Stoll, Mertens, Kraus, Bonnet, Ride, Evans.

Negative votes—none (0).

Voting Papers not returned—two (2): Hubbs, Simpson.

Commissioners Jaczewski and Brinck returned late affirmative votes.

ORIGINAL REFERENCES

The following are the original references for names placed on Official Lists and Index by the Ruling given in the present Opinion:

aletes, Thracides, Geyer, [1832], *in* Hübner, *Zutr. z. Samml. exot. Schmett.* **4** : 31, pl. [126], figs. 731, 732

Phanes Godman, [1901], *in* Godman & Salvin, *Biol. centr.-amer.*, Lep. Rhop. **2** : 741

Phanis Godman, [1900], *in* Godman & Salvin, *Biol. centr.-amer.*, Lep. Rhop. **2** : 548.

CERTIFICATE

I certify that the votes cast on Voting Paper (67)21 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 830.

W. E. CHINA
Acting Secretary
International Commission on Zoological Nomenclature
London
3 *August* 1967

OPINION 831

TELICOTA MOORE, [1881] (INSECTA, LEPIDOPTERA): DESIGNATION OF A TYPE-SPECIES UNDER THE PLENARY POWERS

RULING.—(1) Under the plenary powers all designations of type-species for the nominal genus *Telicota* Moore, [1881], made prior to the present Ruling are hereby set aside, and the nominal species *Papilio colon* Fabricius, 1775, is hereby designated to be the type-species of that genus.

(2) The generic name *Telicota* Moore, [1881] (gender: feminine), type-species, by designation under the plenary powers in (1) above, *Papilio colon* Fabricius, 1775, is hereby placed on the Official List of Generic Names in Zoology with the Name Number 1772.

(3) The specific name *colon* Fabricius, 1775, as published in the binomen *Papilio colon* (type-species of *Telicota* Moore, [1881]) is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2215.

HISTORY OF THE CASE (Z.N.(S.) 1684)

The present case was received as one of fourteen prepared by the late Mr. Francis Hemming. The application was sent to the printer on 4 December 1964 and was published on 5 April 1965 in *Bull. zool. Nomencl.* **22** : 79. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184) and to eight entomological serials. No comment was received.

DECISION OF THE COMMISSION

On 19 April 1967 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (67)22 either for or against the proposal set out in *Bull. zool. Nomencl.* **22** : 79. At the close of the prescribed voting period on 19 July 1967 the state of the voting was as follows:

Affirmative votes—twenty-one (21), received in the following order: China, Vokes, Mayr, Sabrosky, Alvarado, Boschma, Obruchev, Binder, Holthuis, Uchida, Munroe, Lemche, do Amaral, Tortonese, Forest, Stoll, Mertens, Kraus, Bonnet, Ride, Evans.

Negative votes—none (0).

Voting Papers not returned—two (2): Hubbs, Simpson.

Commissioners Jaczewski and Brinck returned late affirmative votes.

Original References

The following are the original references for names placed on Official Lists by the Ruling given in the present Opinion:

colon, Papilio, Fabricius, 1775, *Syst. Ent.* : 531

Telicota Moore, [1881], *Lep. Ceylon* **1** (4) : 169.

CERTIFICATE

I certify that the votes cast on Voting Paper (67)22 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 831.

W. E. CHINA
Acting Secretary
International Commission on Zoological Nomenclature
London
4 *August* 1967

OPINION 832

ZENIS GODMAN, [1900] (INSECTA, LEPIDOPTERA): DESIGNATION OF A TYPE-SPECIES UNDER THE PLENARY POWERS

RULING.—(1) Under the plenary powers all designations of type-species for the nominal genus *Zenis* Godman, [1900], are hereby set aside and the nominal species *Hesperia jebus* Plötz, 1882, is hereby designated to be the type-species of that genus.

(2) The generic name *Zenis* Godman, [1900] (gender: feminine), type-species, by designation under the plenary powers in (1) above, *Hesperia jebus* Plötz, 1882, is hereby placed on the Official List of Generic Names in Zoology with the Name Number 1773.

(3) The specific name *jebus* Plötz, 1882, as published in the binomen *Hesperia jebus* (type-species of *Zenis* Godman, [1900]) is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2216.

HISTORY OF THE CASE (Z.N.(S.) 1685)

The present case was received as one of fourteen prepared by the late Mr. Francis Hemming. The application was sent to the printer on 4 December 1964 and was published on 5 April 1965 in *Bull. zool. Nomencl.* **22** : 80. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184) and to eight entomological serials. No comment was received.

DECISION OF THE COMMISSION

On 19 April 1967 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (67)23 either for or against the proposals set out in *Bull. zool. Nomencl.* **22** : 80. At the close of the prescribed voting period on 19 July 1967 the state of the voting was as follows:

Affirmative votes—twenty-one (21), received in the following order: China, Vokes, Mayr, Sabrosky, Alvarado, Boschma, Obruchev, Binder, Holthuis, Uchida, Munroe, Lemche, do Amaral, Tortonese, Forest, Stoll, Mertens, Kraus, Bonnet, Ride, Evans.

Negative votes—none (0).

Voting Papers not returned—two (2): Hubbs, Simpson.

Commissioners Jaczewski and Brinck returned late affirmative votes.

Original References

The following are the original references for names placed on Official Lists by the Ruling given in the present Opinion:

jebus, Hesperia, Plötz, 1882, *Ent. Ztg.*, Stettin **43** : 443

Zenis Godman, [1900], *in* Godman & Salvin, *Biol. centr.-amer.*, Lep. Rhop. **2** : 588

CERTIFICATE

I certify that the votes cast on Voting Paper (67)23 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 832.

W. E. CHINA
Acting Secretary
International Commission on Zoological Nomenclature
London
4 *August* 1967

OPINION 833

LIMACIA MÜLLER, 1781 (GASTROPODA): DESIGNATION OF A TYPE-SPECIES UNDER THE PLENARY POWERS

RULING.—(1) Under the plenary powers all designations of type-species for the nominal genus *Limacia* Müller, 1781, made prior to the Ruling now given are hereby set aside and the nominal species *Doris clavigera* Müller, 1776, is hereby designated to be the type of that genus.

(2) The generic name *Limacia* Müller, 1781 (gender : feminine), type-species, by designation under the plenary powers in (1) above, *Doris clavigera* Müller, 1776, is hereby placed on the Official List of Generic Names in Zoology with the Name Number 1774.

(3) The specific name *clavigera* Müller, 1776, as published in the binomen *Doris clavigera* (type-species of *Limacia* Müller, 1781) is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2217.

HISTORY OF THE CASE (Z.N.(S.) 1665)

The present case was submitted to the office of the Commission by Dr. Henning Lemche in September 1964. Dr. Lemche's application was sent to the printer on 29 September 1964 and was published on 18 May 1965 in *Bull. zool. Nomencl.* **22** : 100. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184). The application was supported by Prof. H. Engel, Dr. J. Nijssen-Meyer and Mr. Joshua L. Baily, Jr.

DECISION OF THE COMMISSION

On 19 April 1967 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (67)25 either for or against the proposal set out in *Bull. zool. Nomencl.* **22** : 100. At the close of the prescribed voting period on 19 July 1967 the state of the voting was as follows:

Affirmative votes—eighteen (18), received in the following order: China, Vokes, Mayr, Sabrosky, Alvarado, Boschma, Obruchev, Holthuis, Uchida, Lemche, Munroe, do Amaral, Tortonese, Forest, Stoll, Bonnet, Ride, Evans.

Negative votes—three (3): Binder, Mertens, Kraus.

Voting Papers not returned—two (2): Hubbs, Simpson.

Commissioners Jaczewski and Brinck returned late affirmative votes. The following comments were made by Commissioners returning negative votes:

Dr. E. Binder (24.v.67): " As Dr. Lemche puts it, *Limacia* was a completely forgotten name for 170 years, from 1781 to 1959, and it should have remained so. The purpose of the Commission's plenary powers is to promote stability in exceptional cases where this is not achieved by applying the rules; it is not to sanction the unearthing of never-used names."

Dr. Otto Kraus (17.vii.67): " All problems are solved by the designation of *Doris clavigera* Müller, 1776, as type-species of *Limacia*. An earlier selection of a generotype, which would upset the present one, is not known—even to the

applicant. Since there are no other problems, I cannot find any reason for an action by the Commission. The argument that there might (!) be an ' undetected earlier and inadequate type designation ' should not be a reason for the Commission to ' use its plenary powers to set aside all [potential] type-designations for the nominal genus . . . . .' as ' a safeguard ', as is requested by Dr. Lemche."

Original References

The following are the original references for names placed on Official Lists by the Ruling given in the present Opinion:

clavigera, Doris, Müller, 1776, *Zool. dan. Prodr.* : 229

Limacia Müller, 1781, *Zool. dan.* (ed. 2) (Danish edition) **1** : 65.

CERTIFICATE

I certify that the votes cast on Voting Paper (67)25 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 833.

W. E. CHINA
Acting Secretary
International Commission on Zoological Nomenclature
London
13 *September* 1967

OPINION 834

TIPULA NUBECULOSA MEIGEN, 1804 (INSECTA, DIPTERA): ADDITION TO THE OFFICIAL LIST OF SPECIFIC NAMES

RULING.—(1) The use of the plenary powers to suppress the specific name *nubeculosa* Meigen, 1804, as published in the binomen *Tipula nubeculosa*, is hereby refused.

(2) The following specific names are hereby placed on the Official List of Specific Names in Zoology with the Name Numbers specified:

(a) *hortorum* Linnaeus, 1758, as published in the binomen *Tipula hortorum* (Name No. 2218);

(b) *nubeculosa* Meigen, 1804, as published in the binomen *Tipula nubeculosa* (Name No. 2219).

HISTORY OF THE CASE (Z.N.(S.) 895)

The present case was first submitted to the office of the Commission in 1955, by Dr. Henning Lemche and Dr. A. M. Hemmingsen. A revised application was submitted in September 1964, sent to the printer on 29 September 1964 and published on 5 April 1965 in *Bull. zool. Nomencl.* **22** : 53–54. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184) and to six entomological serials. The application was opposed by Dr. Bo Tjeder (*Bull. zool. Nomencl.* **22** : 280) who advocated that the Rules be applied.

DECISION OF THE COMMISSION

On 19 April 1967 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (67)24 either for or against the proposal set out in *Bull. zool. Nomencl.* **22** : 53–54. Commissioners were informed that those who voted against the use of the plenary powers as proposed by Drs. Lemche and Hemmingsen would be assumed to have voted for Dr. Tjeder's proposals. At the close of the prescribed voting period on 19 July 1967 the state of the voting was as follows:

Affirmative votes—eight (8), received in the following order: Mayr, Binder, Holthuis, Munroe, Lemche, Tortonese, Bonnet, Ride.

Negative votes—thirteen (13): China, Vokes, Sabrosky, Alvarado, Boschma, Obruchev, Uchida, do Amaral, Forest, Stoll, Mertens, Kraus, Evans.

Voting Papers not returned—three (3): Hubbs, Jaczewski, Simpson.

Commissioner Brinck returned a late negative vote. In returning his vote Dr. Sabrosky made the following comment. " Mannheims (1933) over thirty years ago did a thorough job based on type material, and I believe this should be followed. The species is too unimportant to preserve the incorrect identification of Schummel."

ORIGINAL REFERENCES

The following are the original references for names placed on the Official List by the Ruling given in the present Opinion:

hortorum, *Tipula*, Linnaeus, 1758, *Syst. Nat.* (ed. 10) **1** : 585

nubeculosa, *Tipula*, Meigen, 1804, *Klass. Beschr. Zweifl. Ins.* : 70.

CERTIFICATE

I certify that the votes cast on Voting Paper (67)24 were cast as set out above, that the proposal contained in that Voting Paper for the use of the plenary powers was not adopted, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 834.

W. E. CHINA
Acting Secretary
International Commission on Zoological Nomenclature
London
15 *September* 1967

ARGYNNIS CHLORODIPPE VILLIERS & GUENÉE, 1835 (INSECTA, LEPIDOPTERA): PROPOSED SUPPRESSION UNDER THE PLENARY POWERS. Z.N.(S.) 1801

By N. D. Riley (*British Museum* (*Natural History*), *London*)

In 1835 (*Tab. syn. Lep. Europe:* 56) Villiers and Guenée described, as a species occurring in Sicily, a variety of the well-known High Brown Fritillary *Argynnis adippe* Schiffermueller, 1775, and gave to it the name *Argynnis chlorodippe*. It was in fact the well-known form of *A. adippe* in which the silver markings of the undersides of the wings are replaced by buff, a form which had already been described by Ochsenheimer (1816, *Schmett. Eur.* **4** : 118) as *Argynnis cleodoxa*.

2. In 1851 (*Syst. Schmett. Europe* **6** : 5) Herrich-Schaeffer described the very different and distinct subspecies of *Argynnis adippe* that occurs in Spain, also under the name *Argynnis chlorodippe*, being apparently unaware of the existence of the name *Argynnis chlorodippe* Villiers and Guenée.

3. Consistently since 1851 the Spanish subspecies of *A. adippe* has always been known either as *Argynnis adippe chlorodippe* H.S. or as a distinct species as *Argynnis chlorodippe* H.S. to all students of the European Rhopalocera. I can find only one reference to *Argynnis chlorodippe* Villiers and Guenée, namely by W. F. Kirby who simply lists it in his *Synonymic Catalogue of Diurnal Lepidoptera* (1891 : 158). I know of no case in which the name has been used in a taxonomic or faunistic paper dealing with the butterflies of any part of Europe or with *Argynnis adippe* in particular. Nevertheless it is a senior primary homonym of *A. chlorodippe* Herrich-Schaeffer.

4. *Argynnis adippe* is not a butterfly of any economic importance or great biological interest, yet it is one of the best known of European butterflies. It would seem a pity to allow a long forgotten senior homonym to supplant the very familiar name, *chlorodippe* H.S., of its most striking subspecies. Accordingly I invite the International Commission:

(1) to use its plenary powers to suppress the specific name *chlorodippe* Villiers and Guenée, 1835, as published in the binomen *Argynnis chlorodippe*, for the purposes of both the Law of Priority and the Law of Homonymy;

(2) to place the specific name *chlorodippe* Herrich-Schaeffer, 1851, as published in the binomen *Argynnis chlorodippe*, on the Official List of Specific Names in Zoology;

(3) to place the specific name suppressed under the plenary powers in (1) above on the Official Index of Rejected and Invalid Specific Names in Zoology.

HETEROTIS EHRENBERG, 1829, AND *CLUPISUDIS* SWAINSON, 1839 (PISCES): PROPOSAL TO PLACE ON THE OFFICIAL LIST OF GENERIC NAMES IN ZOOLOGY. Z.N.(S.) 1807

By F. d'Aubenton and J. Daget (*Office de la Recherche Scientifique et Technique Outre-Mer, Paris*)

The object of the present application is to request the Commission to confirm the validity of the generic names *Heterotis* Ehrenberg in Rüppell, 1829 and *Clupisudis* Swainson, 1839.

History of the Case:

2. In 1817 Cuvier (*Règne Animal* (ed. 1) **2** : 180) defined a new genus *Sudis* without including any nominal species in it. The same generic name had already been introduced validly by Rafinesque in 1810 (*Caratteri di alcuni nuovi generi e nuove specie di animali e piante della Sicilia:* 60) for an entirely different fish. During an expedition to Egypt made during the years 1820–1825, C. G. Ehrenberg recorded a fish from the Nile which he called *Heterotis niloticus* and of which he had made a plate dated 1827*.

3. However neither the name nor the plate were published at this date and Ehrenberg was content to leave his discovery to ichthyologists of the period: Cuvier, Valenciennes and Rüppell. [It was not until 1836 that he himself used the name *Heterotis niloticus* in *Abh. phy-Kl. K. Ak. Wiss.* Berlin, **1834** : 532.] Actually Cuvier in 1829 (*Règne Animal*, (ed. 2), **2** : 180) recorded the species under the name *Sudis niloticus* Ehrenberg at the same time as a species from Senegal and one from Brazil which he named *Sudis adansonii* and *Sudis gigas* respectively. Since no type-species was designated at the time, these three nominal taxa were equally acceptable for a subsequent designation of the type-species of *Sudis* Cuvier, 1817 (non Rafinesque, 1810). All authors have followed one another in recognizing the validity of the specific name *niloticus* published for the first time by Cuvier in 1829 and attributed explicitly by him to Ehrenberg.

4. The same year but a little later, Rüppell (1829, *Beschreibung und Abbildung mehrerer nuer Fische im Nil endeckt:* 10) gave a detailed description of the species which he named *Sudis niloticus*. In a footnote the same author added: " Da übrigens gerade Herr Valenciennes meine hier zu beschreibende Sudisart von dem *Heterotis niloticus* des Herrn Dr. Ehrenberg verscheiden glaubt, welches durchaus irrig ist." This citation of an available specific name in conjunction with a new generic group name constituted an indication in the sense of Article 16 of the International Code of Zoological Nomenclature and renders available the generic name *Heterotis* Ehrenberg in Rüppell, 1829. *Helicobranchus,*

* This plate on which is printed " ad Nat. del C. G. Ehrenberg " and " F. W. Linger jun. Sculp, Berlin 1827 " was not actually published until 1899 in a posthumous work of Hemprich and Ehrenberg entitled: *Symbolae physicae*. . . . The legend of the plate, drawn up by Hilgendorf, bears the title: *Heterotis nilotica* H. et E. *Heterotis niloticus* Ehrenberg". It represents, in left lateral view, an individual measuring 33 cm. in standard length and 37 cm. in total length. Small figures indicate the number of rays observed on the fins of the form: P.11; V.6: D.34: A.37; C.14.

proposed by Hyrtl in 1854 (*Denkschr. Ak. Wien.* **8** : 86) as a more correct name for *Heterotis* is an unnecessary new name and falls as a synonym of *Heterotis* Ehr. in Rüppell.

5. For the genus *Sudis* Cuvier, 1817, non *Sudis* Rafinesque 1810, Swainson in 1839 (*Natural History of Fishes* . . . **2** : 286) proposed the replacement name *Clupisudis*. In virtue of Article 67 i of the International Code of Zoological Nomenclature this generic name must have applied to it the same type-species as that of the replaced name, *Sudis* Cuvier, 1817. This last has been designated by Jordan (1917, *The genera of Fishes* **1** : 99), who wrote: " *Sudis* Cuvier, 1817, type (not named) *Sudis gigas* Cuvier." The generic names, *Arapaima* J. Müller, 1843 (*Beiträge zur Kentniss der natürlichen Familien der Fische :* 326) and *Vastres* Valenciennes, 1846 (*Hist. naturelle des Poissons* **19** : 433) also proposed as replacement names for *Sudis* Cuvier, 1817, are junior synonyms of *Clupisudis* Swainson, 1839.

Gender and termination of the root to be employed in the formation of derivatives:

6. The word *Heterotis* alludes to the suprabranchial organ. Valenciennes, 1846 (*Hist. Poiss.* **19** : 465) writes: " M. Ehrenberg le croyant une annexe de l'oreille, imagina . . . de désigner son poisson par la dénomination *Heterotis*." This name has been formed from two greek words ἕτερον and ους, ὠτός, then latinized into *-is*. Now latin words ending in *-is*, of the third declension, are masculine or feminine and are declined like *lapis*, *lapidis* or like *collis*, *collis*. In choosing *niloticus* as the name of the species, it is clear that Ehrenberg intended to give to *Heterotis* the masculine gender and that Hilgendorf (in Hemprich and Ehrenberg, 1899) was in error in writing " *Heterotis nilotica* H. & E." The same author in the legend to plate IX, writes in the genitive *Heterotis niloticae* while on the plate itself one finds *Heterotidis niloticae*. The correct form of the genitive being *Heterotis*, the name of the family-group corresponding should be spelled HETEROTIDAE; similarly the family-group name derived from *Clupisudis* should be spelled CLUPISUDIDAE. These two names were published in this form simultaneously by Jordan (1923, *A classification of Fishes:* 123).

Type-species and synonymies

7. *Heterotis niloticus* being the single nominal species originally included in the genus *Heterotis*, it follows that *Sudis niloticus* (Ehrenberg) Cuvier, 1829 is the type-species by monotypy. The type of the species cannot now be found in the Berlin Museum. Dr. C. Karrer writes in a letter of 6.4.1967: " In unserem Eingangskatalog ist unter der Nr. 3935 ein von Hemprich und Ehrenberg gesammeltes Exemplar als Trockenpräparat aufgeführt, trägt oben hier kein Typuszeichen . . . Unter den jetzt noch vorhandenen Trockenpräparaten befindet es sich aber leider nicht mehr." Consequently of the type specimen (or syntype specimens), on which the nominal species *Heterotis niloticus* was founded, there remains only the plate engraved in 1827, with which to identify the taxon. By the application of Article 74b of the International Code we designate this figure to represent the lectotype of the species which must be validly designated by the binomen *Heterotis niloticus* (Ehrenberg in Cuvier), 1829.

8. *Sudis adansonii* Cuvier, 1829 and *Heterotis ehrenbergii* Valenciennes, 1846 are subjective synonyms. Actually the type of *Sudis andansonii* is a specimen from Senegal collected by Adanson and deposited in the Muséum national d'Histoire naturelle, Paris, as No. 3608, while the types of *Heterotis ehrenbergii* are two specimens from the Nile collected by Darnaud and deposited in the Paris Museum as No. A 824 and B 2221.

9. *Sudis gigas* is the type-species of the genus *Clupisudis* by the subsequent designation of Jordan. Now the specific name *gigas* was published for the first time not by Cuvier himself in 1829 but by Schinz (H. R.) in a german translation of the first edition of the *Règne Animal* (1822, *Das Thierreich* **2** : 305). Schinz made reference to the figure published under the name *Vastrès* given by Cuvier in 1817 (*Règne Animal* **4,** pl. X, fig. 4) and which represented a specimen from Brazil presented by the Cabinet of Lisbon in 1808. This specimen preserved in the Paris Museum as No. A 8837 is the type of the species which must be validly designated by the binomen *Clupisudis gigas* (Schinz in Cuvier), 1822.

10. *Vastres cuvieri* Valenciennes, 1846 (*Hist. Poissons* **19** : 441) is an objective synonym of *Clupisudis gigas*. *Vastres mapae* Valenciennes, 1846 (*Hist. Poiss.* **19** : 449) is a subjective synonym of which the type, collected in Guiana by Pradier, is preserved in the Paris Museum as No. A 8836. *Sudis pirarucu* Spix, 1829 and *Vastres agassizii* Valenciennes, 1846 are subjective synonyms both having for type the figure published by Spix (1829, *Selecta genera et species* . . ., pl. 16). Finally *Vastres arapaima* Valenciennes, 1846 (*Hist. Poiss.* **19** : 461) is equally a subjective synonym having for its type the figure published under the name *Sudis gigas* by Schomburgk (1841, *The Natural History of the Fishes of Guiana* **1,** pl. xi).

11. In conclusion the International Commission of Zoological Nomenclature is requested:

(1) to place on the Official List of Generic Names in Zoology, the following names:
   (a) *Heterotis* Ehrenberg in Rüppell, 1829 (gender : masculine), type-species, by monotypy, *Sudis niloticus* Ehrenberg in Cuvier, 1829;
   (b) *Clupisudis* Swainson, 1839 (gender : masculine), type-species, by subsequent designation by Jordan, 1917, for *Sudis* Cuvier 1817, *Sudis gigas* Schinz in Cuvier, 1822;

(2) to place on the Official List of Specific Names in Zoology, the following names:
   (a) *niloticus* Ehrenberg in Cuvier 1829, as published in the binomen *Sudis niloticus* (type-species of *Heterotis* Ehrenberg in Rüppell, 1829);
   (b) *gigas* Schinz in Cuvier, 1822, as published in the binomen *Sudis gigas* (type-species of *Clupisudis* Swainson, 1839);

(3) to place on the Official List of Family-Group names in Zoology the following names (Pisces, Osteoglossiformes):
   (a) HETEROTIDAE Jordan 1923 (*Class. Fish.* : 123), (type-genus *Heterotis* Ehrenberg in Rüppell, 1829);
   (b) CLUPISUDIDAE Jordan 1923 (type-genus *Clupisudis* Swainson, 1839).

TEREBRATULINA D'ORBIGNY, 1847 (BRACHIOPODA): PROPOSED DESIGNATION OF A TYPE-SPECIES UNDER THE PLENARY POWERS. Z.N.(S.) 1809

By C. H. C. Brunton and L. R. M. Cocks
(*British Museum* (*Natural History*), *London*)

Purpose of the Application:

This application proposes to clear the difficulty created by the change in the description by Linnaeus to his species *Anomia caputserpentis* in 1758 and 1767. This species, *sensu* 1767, is the type-species of the genus *Terebratulina* d'Orbigny, 1847, and synonymous with the species *Anomia retusa* Linnaeus, 1758. Thus, as a result of d'Orbigny's misidentification of *A. caputserpentis* we wish to change the type-species of *Terebratulina* from *A. caputserpentis* Linnaeus, 1758, to *A. retusa* Linnaeus, 1758.

History:

2. This application arises from the recent review of the brachiopods in the Linnaean Collection (Brunton, Cocks and Dance 1967).

3. In the tenth edition of the *Systema Naturae* Linnaeus erected the species *Anomia caputserpentis* (1758 : 703, species number 200), describing it as follows: " A. testa ovata laevi gibba: valvula altera apice longiore. *Column. purp.* 22.f.1. Habitat ... fossilis. Natium altera postice gibba perforata." In the same publication (1758 : 701, number 191) Linnaeus erected the species *Anomia retusa*, with the following description: " A. testa obovata striata retusa: convalle longitudinali, nate performata. *Habitat in pelago* Norvegico *supra Alcyonia. D. Pennant.*" The two species are distinctive; the former being a smooth shelled fossil species and the latter a strongly ribbed living species.

4. Specimens of both these *Anomia* species are preserved in the Linnaean Collection and are those isolated by Hanley after the publication of his *Ipsa Linnaei Conchylia* (1855). Two specimens of *A. caputserpentis* Linnaeus, 1758, are preserved in oolitic calcareous matrix and there are four specimens of *A. retusa* Linnaeus, 1758, from Recent seas. Lectotypes for both species have been selected and figured (Brunton, Cocks and Dance, 1967).

5. In the twelfth edition of the *Systema*, Linnaeus (1767 : 1153) changed his description of *A. caputserpentis* to: " A. testa obovata striata tomentosa: valvula altera nate longiore perforata. *Fn. suec. 2154. Column. purp. 22.f.2. Gualt. test.t. 96.f.*D. *Habitat in abysso* M. Norvegici. Testa *obovata, tomentoso, antice compressa, longitudinaliter striata, alba.* Valvula superior *postice prominens longiorque apice perforato ligamento affixo coralliis Zoophytisve; haec antice paulo longior & declinata.* Inferior *valvula rotundata, antice retusa, postice brevior.* Margo *utriusque crenulatus.* Cardo *dente utriusque testae utrinque ad latus prominens*," while that of *A. retusa* remained unchanged. Thus in the 1767 edition these two species appear to be indistinguishable and this change in concept of *A. caputserpentis* has resulted in ambiguity.

6. In 1847 d'Orbigny erected the genus *Terebratulina* with *Anomia caputserpentis* as type-species. D'Orbigny clearly thought of this as the species as redefined in 1767, i.e. the species subsequently considered as synonymous with *Anomia retusa*, because he illustrated a brachial valve interior (1847, pl. 7, fig. 17) which is closely comparable to Recent *A. retusa* now in the Linnaean Collection. This internal morphology is not what we should expect to see within the smooth shelled fossil species *A. caputserpentis* Linnaeus, 1758.

7. Most subsequent authors (Hanley 1855 : 123; Davidson, 1856 : 17) have recognised that *A. caputserpentis* Linnaeus, 1767, is synonymous with *A. retusa* Linnaeus, 1758. Dall (1920 : 296) also recognised this, but is in error to place *A. retusa* as the type-species of *Terebratulina* without further discussion.

8. Since the erection of the genus *Terebratulina* d'Orbigny there has been no doubt as to its definition and the smooth species *Anomia caputserpentis* Linnaeus, 1758, could never be accommodated within this genus. However, despite the work of Dall (1920) and Thompson (1927 : 186) who stressed that *Anomia retusa* should be considered the type-species of *Terebratulina*, the original name given by d'Orbigny remains in use.

9. We are now in the situation where it is generally agreed that *Anomia caputserpentis* Linnaeus, 1758, is not of the genus *Terebratulina* d'Orbigny; *A. caputserpentis* Linnaeus, 1767 = *A. retusa* Linnaeus, 1758; and that d'Orbigny's original concept of the genus *Terebratulina* is based upon the living species *A. caputserpentis* Linnaeus, 1767 [*non* 1758] which is the junior synonym of *A. retusa* Linnaeus 1758.

10. Thus, we feel it to be desirable to propose that the type-species of *Terebratulina* d'Orbigny, 1847, be changed from *Anomia caputserpentis* Linnaeus, 1758, to *Anomia retusa* Linnaeus, 1758. This disposes of the ambiguity which was originally caused by Linnaeus himself when he altered his definition of *A. caputserpentis* between 1758 and 1767.

Proposals

11. Therefore we request the International Commission:

(1) to use its plenary powers:
  (a) to set aside all designations of type-species for *Terebratulina* d'Orbigny, 1847, and
  (b) having done so to designate as the type-species of *Terebratulina* d'Orbigny, 1847, the nominal species *Anomia retusa* Linnaeus, 1758;

(2) to place the generic name *Terebratulina* d'Orbigny, 1847 (gender : feminine) on the Official List of Generic Names in Zoology;

(3) to place the specific name *Anomia retusa* Linnaeus, 1758, type-species of *Terebratulina* d'Orbigny, by the plenary powers of 1(b) above, on the Official List of Specific Names in Zoology.

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PROPOSED SUPPRESSION UNDER THE PLENARY POWERS OF THREE SPECIES NAMES OF BRACHIOPOD ERECTED BY LINNAEUS (1758). Z.N.(S.) 1810

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Purpose of the present application

This application proposes to place on the Official Index of Rejected Specific names the species *Anomia striatula* Linnaeus, 1758, *Anomia lacunosa* Linnaeus, 1758, and *Anomia hysterita* Linnaeus, 1758, as they are no longer in common use and because they would be senior synonyms of very well known species.

History

2. This application arises from a review of all the brachiopod specimens in the Linnaean Collection (Brunton, Cocks and Dance 1967), and the illustration, in many cases for the first time, of the types of Linnaeus' brachiopod species. Each of the species we propose for rejection will now be dealt with in turn.

(i) *Anomia striatula*

3. Linnaeus erected this species in 1758 (page 702, number 194) without illustration and with the following brief diagnosis " A. testa subrotundo-dilatata utrinque gibba striata, valvis aequalibus. *Habitat . . . fossilis. Testa rotundata, sed duplo latior quam longa, postice gibbosiore, antice margine tenui.*" This diagnosis was repeated without change in the 12th edition apart from the last word " tenuit." Other than Hanley (1855), who isolated a single specimen from the Linnaean collection " with doubt " as the representative of this species, no-one to our knowledge has quoted the species since its original erection. The specimen thus labelled in the Linnaean collection is a Carboniferous enteletacean, undoubtedly attributable to the species *Conchyliolithus* (*Anomites*) *resupinatus* Martin, 1809, plate 49, figs 13 and 14, the type-species of the genus *Schizophoria* King, 1850 : 106, in itself the nominal genus for the subfamily SCHIZOPHORIINAE Schuchert and Levene, 1929. *Schizophoria resupinata* is a very well-known species and extensively quoted in the literature. In fact, owing to dispute over the validity of Martin's original work, the species *resupinatus* is already on the Official List of Specific Names, name no. 734, as a result of Opinion 419 of the Commission (1956). Thus to revive *A. striatula* would reverse this Opinion, and would in any case serve no useful purpose.

(ii) *Anomia lacunosa*

4. Linnaeus (1758 : 702) erected the species as follows: " A. testa subrotunda multisulcata: valvulis apice plicatis; altera breviore lacunosa, apice quadridentata. *Mus. Tessin . . . t.5.f.6. List. angl. 249.t.9.f.57. Grew. mus.t. 19.f.6. Habitat . . .fossilis.*" He repeated this without change in 1767. In fact the species was used by three Swedish authors in the early nineteenth century Wahlenberg (1821 : 67), Dalman (1828 : 139, plate 4, fig. 1) and Hisinger (1837 : 80, plate 23, fig. 3) and Dalman illustrated material in all respects similar to the specimens today preserved in the Linnaean collection labelled as *A.*

lacunosa. These are, however, not similar to the three figures quoted by Linnaeus in his original description, which, although they may be ascribed generally to the order Rhynchonellida, are other genera than Linnaeus's specimens or Dalman's figures. Meanwhile, after Linnaeus's description, but before the three Swedish authors, J. Sowerby (1816 : 38, plate 118, fig. 3) had erected the species *Terebratula wilsoni*, from the Upper Silurian, since made the type-species of the genera *Wilsonia* Kayser, 1871 (*non* Ridgway 1823), *Wilsonella* Nikiforova, 1937 (*non* Carter 1885) and *Sphaerirhynchia* Cooper & Muir-Wood, 1951, in turn. There is no doubt that *A. lacunosa* and *S. wilsoni* are conspecific as the species is readily distinguishable from other rhynchonellids of the same age even though the types of the former come from Gotland and the latter from Britain.

5. Sowerby's name has been used for the species in question ever since the publication and popularity of " The Silurian System " (Murchison 1839) and *A. lacunosa* has not been used since the middle of the last century. In fact the last mention of *A. lacunosa* which we can find is by Lindström (1860 : 366), who, in describing the Gotland fauna, actually put " *Ter. lacunosa* WAHLENB." [sic] as a synonym of *wilsoni*.

6. Thus we propose that *Anomia lacunosa* should be put on the Index of rejected names, not merely because of its long lack of use, but because *S. wilsoni* is so widely known, not only amongst palaeontologists, but amongst stratigraphers as well. For example the Wilsonia Shales (Ludlow) of Breconshire and the Wilsonia wilsoni Grits (Ludlow) of Montgomeryshire are both named after the species in question.

(iii) *Anomia hysterita*

7. Linnaeus erected this species in 1758 (page 703, number 203) giving the following diagnosis: " A testa dilatata laevi convexa striata subtriloba, antice depressa, margine acuto. *Mus. Tess. 90.t.5.f.1,2,2. Column purp. 22.f.3*? Trilobos. *Wolff. hass. 29.t.3.f.3,4,5. Worm.mus.t.83. Habitat . . . fossilis.*" No descriptive change was made in the twelfth edition of 1767.

8. Baumer, in 1763, figured a specimen called *hysterita* which depicted the internal mould of a *Schizophoria*—like brachiopod comparable to the single *Anomia hysterita* specimen now in the Linnaean Collection (See Brunton, Cocks and Dance, 1967 : 164).

9. From the figures quoted by Linnaeus in 1758 it is clear that his interpretation of *Anomia hysterita* was very broad, and the name was possibly given to any specimen preserved as an internal mould. Hanley (1855) curated three specimens under this name, but he recognised that two distinct species were involved; two specimens being internal moulds of spiriferaceans and the third being the *Schizophoria* species to which we believe Linnaeus first attached the name *hysterita*, and which has been selected as lectotype.

10. Probably because of its confused introduction to the literature the name *Anomia hysterita* has seldom been used and the only record of its use this century that we can find is in a general paper by Schmidt (1935 : 27). In this paper the name " *Schizophoria hysterita* " is given as caption only to an illustration of an enteletacean brachiopod like that illustrated by Baumer.

11. Schlotheim erected the species *Hysterolithes vulvarius* in 1820 (:247) for a Devonian *Schizophoria*. Two of Schlotheim's original specimens remain in the Humboldt-University of Berlin, one of which retains the original Schlotheim label bearing the specific name. A study of these specimens convinces us that they can be regarded as conspecific with the specimen called *A. hysterita* in the Linnaean Collection.

12. In Central Europe *Schizophoria vulvaria* (Schlotheim) is a well known species from the Lower Devonian and the name is entrenched within the literature. To insist that the species *A. hysterita* in the Linnaean Collection was certainly the specimen held by Linnaeus and that it was, therefore, senior synonym of *S. vulvaria* (Schlotheim 1820) would cause considerable confusion if the Law of Priority were strictly applied.

13. Thus, we propose that the name *Anomia hysterita* be put onto the Index of rejected Names, both because of its long lack of usage and in order to maintain the validity of the well known name *vulvaria* in the interests of stability.

Proposals

14. We request the International Commission:

(1) to use its plenary powers to suppress the following specific names for the puposes of the Law of Priority but not for those of the Law of Homonymy:

(a) *striatula* Linnaeus, 1758, as published in the binomen *Anomia striatula*;

(b) *lacunosa* Linnaeus, 1758, as published in the binomen *Anomia lacunosa*;

(c) *hysterita* Linnaeus, 1758, as published in the binomen *Anomia hysterita*;

(2) to place the three specific names suppressed under the plenary powers in (1) above on the Official Index of Rejected and Invalid Specific Names in Zoology;

(3) to place the following specific names on the Official List of Specific Names in Zoology:

(a) *wilsoni* J. Sowerby, 1816, as published in the binomen *Terebratula wilsoni*;

(b) *vulvarius* Schlotheim, 1820, as published in the binomen *Hysterolithes vulvarius*.

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TINTINNIDIUM AND *LEPROTINTINNUS* (ORDER TINTINNIDA): PROPOSED DESIGNATION OF TYPE-SPECIES UNDER THE PLENARY POWERS Z.N.(S.) 1811

By Helen Tappan (*University of California, Los Angeles, California*) and Alfred R. Loeblich, Jr. (*Chevron Research Company, La Habra, California*)

The purpose of this proposal is to maintain the current usage of the generic name *Tintinnidium* Kent, 1881, with its type-species *T. fluviatile* (Stein) Kent, 1881, as designated by Kofoid and Campbell, 1939 (*Bull. Mus. comp. Zool.*, Harvard **84** : 36) against the prior designation of *T. marinum* Kent, 1881 as type-species by Brandt, 1907 (*Ergebn. Plankton-Exped. Humbolt-Stiftung* III. L.a. : 14) and of *Leprotintinnus* Jörgensen, 1900, with type-species *L. pellucidus* (Cleve) Jörgensen, 1901, as designated by Kofoid and Campbell, 1929 (*Univ. Calif. Publ. Zool.* **34** : 17), against the prior type designation of *L. bottnicus* (Nordqvist) Jörgensen, 1900, by Brandt, 1907 (*Ergebn. Plankton-Exped. Humboldt-Stiftung* III. L.a. : 14). *Tintinnidium marinum* Kent, 1881, is a junior synonym of *Tintinnus inquilinus* (O. F. Müller) Schrank, 1803, the type-species of *Tintinnus*. Currently recognized families are based on both *Tintinnus* and *Tintinnidium*.

2. Schrank, 1803 (*Fauna Boica* **3**(1) : 317), described the genus *Tintinnus*, including within it three species including *T. inquilinus* = *Trichoda inquilina* O. F. Müller, 1776 (*Zool. Dan.*, appendix: 218), which was later designated as type-species by Brandt, 1907 (*Ergebn. Plankton-Exped. Humboldt-Stiftung* III. L.a. : 14). Kofoid and Campbell, 1929 (*Univ. Calif. Publ. Zool.* **34** : 329) designated *Tintinnus lusus-undae* Entz Sr. as type-species of *Tintinnus*. In 1939 Kofoid and Campbell (*Bull. Mus. comp. Zool.*, Harvard **84** : 317) stated that Apstein, 1915 (*SitzBer. Ges. naturf. Freunde* : 123) had previously designated *T. inquilinus* (O. F. Müller) Schrank, 1803, as type of *Tintinnus*. Neither they nor Apstein were aware that the same species was earlier designated by Brandt, 1907, as type-species. As this type designation changed the generic content under their classification, Kofoid and Campbell, 1939 (op. cit.), erected the new genus *Eutintinnus* with type-species *E. biricius* (Kofoid and Campbell, 1929), to include such species as *E. lususundae* (Entz Sr.). *Tintinnus* was then restricted to include only four species with homogeneous walls and closed aboral end, similar to *T. inquilinus*, whereas *Eutintinnus* included the large group of pelagic forms with open aboral end. The genus *Tintinnus* is type of the family TINTINNIDAE Claparède and Lachmann, 1858, and subfamily TINTINNINAE Claparède and Lachmann, 1858.

3. Kent, 1881 (*A manual of the Infusoria* : 611) described *Tintinnidium*, and Brandt, 1907 (*Ergebn. Plankton-Exped. Humboldt-Stiftung* III. L.a. : 14), designated *T. marinum* Kent, 1881, as its type-species. This species was included by Kofoid and Campbell, 1929 (*Univ. Calif. Publ. Zool.* **34** : 12), in the synonymy of *Tintinnidium inquilinum* (O. F. Müller) Fauré-Fremiet, 1908. Unaware of Brandt's previous type designation, Kofoid and Campbell, 1929 (*Univ. Calif. Publ. Zool.* **34** : 9) designated *Tintinnidium mucicola* (Claparède

and Lachmann) Daday, 1887, as type of *Tintinnidium*, although this was not in the original list of species. In 1939, because of the removal of the species *inquilinus* to *Tintinnus*, Kofoid and Campbell (*Bull. Mus. comp. Zool.*, Harvard **84** : 317) restricted *Tintinnidium* to include only eight species with aborally closed soft lorica containing agglutinated particles. Recognizing that their earlier type designation was in error, they then designated as type-species one of the originally included species, *T. fluviatile*. The family TINTINNIDIIDAE Kofoid and Campbell, 1929, is based on this genus.

4. Later workers have followed Kofoid and Campbell in their circumscription of the genera *Tintinidium* family TINTINNIDIIDAE, *Tintinnus* and *Eutintinnus*, family TINTINNIDAE. If designation of *T. marinum* Kent as type of *Tintinnidium* were followed, this genus would become a subjective isotypic synonym of *Tintinnus*, and the species now referred to *Tintinnidium* would be left with no generic assignment. The family name would also require change. Retention of Kofoid and Campbell's 1939 designation would thus be consistent with current usage and promote greater stability in nomenclature.

5. *Leprotintinnus* was described by Jörgensen, 1900 (*Bergens Mus. Årb.* **1899** (2) : 10) with two included species, *L. brandtii* (Nordqvist) and *L. bottnicus* (Nordqvist). *Condonella brandti* Nordqvist was later removed from *Leprotintinnus* to *Tintinnopsis*. *Tintinnus bottnicus* Nordqvist, 1890 (*Medd. Soc. Fauna Flora Fenn.* **17** : 126, fig. 5), was subsequently designated as type by Brandt, 1907 (*Ergebn. Plankton-Exped. Humboldt-Stiftung* III. L.a. : 14). Jörgensen, 1901 (*Bergens Mus. Årb.* **1900** (6) : 18) stated that he had originally misidentified as *L. bottnicus* specimens correctly referrable to *L. pellucidus* (Cleve) Jörgensen, 1901. Kofoid and Campbell, 1929 (*Univ. Calif. Publ. Zool.* **34** : 17), unaware of the earlier designation by Brandt of *L. bottnicus* as type-species, designated *L. pellucidus* (Cleve) Jörgesen, 1901, as type-species, although this nominal species was not originally included in the genus. The species originally included as *L. bottnicus* by Jörgensen in his definition of the genus was in reality *L. pellucidus*, hence as a misidentified type-species it must be referred to the Commission (ICZN Art. 70(a)). Stability of nomenclature will best be preserved by recognition of the species *L. pellucidus* as type of *Leprotintinnus*, designated by Kofoid and Campbell, inasmuch as this species was that actually studied by Jörgensen.

6. In order to maintain current usage at the generic and family level, thereby promoting greater stability of nomenclature in the tintinnids the International Commission on Zoological Nomenclature is requested:

(1) to use its plenary powers to set aside all designations of type-species for the nominal genus *Tintinnidium* Kent, 1881, made prior to the Ruling now proposed, and having done so to designate *Tintinnus fluviatilis* Stein, 1863, to be the type of that genus;

(2) to use its plenary powers to set aside all designations of type-species for the nominal genus *Leprotintinnus* Jörgensen, 1900, made prior to the Ruling now proposed, and having done so to designate *Tintinnus pellucidus* Cleve, 1899, to be the type of that genus;

(3) to place the following generic names on the Official List of Generic Names in Zoology:

(a) *Tintinnus* Schrank, 1803 (gender : masculine), type-species, by designation by Brandt, 1907, *Trichoda inquilina* O. F. Müller, 1776;

(b) *Tintinnidium* Kent, 1881 (gender : neuter), type-species, by designation under the plenary powers in (1) above, *Tintinnus fluviatilis* Stein, 1863;

(c) *Leprotintinnus* Jörgensen, 1900 (gender : masculine), type-species by designation under the plenary powers in (2) above, *Tintinnus pellucidus* Cleve, 1899;

(4) to place the following specific names on the Official List of Specific Names in Zoology:

(a) *inquilina* O. F. Müller, 1776, as published in the binomen *Trichoda inquilina* (type-species of *Tintinnus* Schrank, 1803);

(b) *fluviatilis* Stein, 1863, as published in the binomen *Tintinnus fluviatilis* (type-species of *Tintinnidium* Kent, 1881);

(c) *pellucidus* Cleve, 1899, as published in the binomen *Tintinnus pellucidus* (type-species of *Leprotintinnus* Jörgensen, 1900);

(5) to place the following family-group names on the Official List of Family-Group Names in Zoology;

(a) TINTINNIDAE Claparède and Lachmann, 1858 (type-genus *Tintinnus* Schrank, 1803);

(b) TINTINNIDIIDAE Kofoid and Campbell, 1929 (type-genus *Tintinnidium* Kent, 1881).

CYSTIDEA BARRANDE 1868 (CYSTOIDEA: GLYPTOCYSTITIDA): PROPOSED SUPPRESSION UNDER THE PLENARY POWERS Z.N.(S.) 1813

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This communication requests the International Commission on Zoological Nomenclature to reject for the purposes of the Law of Priority, but not for those of the Law of Homonymy, the genus-group name *Cystidea* Barrande, 1868.

2. In the following passage Barrande (1867, p. 179) introduced the binomina *Cystidea bohemicus* and *Cystidea sedgwicki*:

" Nous rappelons, que la bande d4 est l'horizon de notre division inférieure, qui fournait le plus de formes d'Échinodermes, dont quelques unes sont représentées par très nombreux individus, le plus souvent aplatis dans les couches schisteuses. Nous citerons commes exemples: d'abord *Echinosphaerites infaustus*, voisin de *Echinosph. aurantium* et dont les spécimens écrasés remplissent des couches entières. En second lieu, *Cystidea Bohemica* et *Cyst. Sedgwicki*, formes aux quelles nous nous réservons d'assigner plus tard un nom generique." Barrande 1867, p. 179.

As far as I am aware this constitutes the first use of *Cystidea* in a binomen and it is clear that Barrande intended *Cystidea* to be a collective group name, i.e. a name to cover a group of recognizable species, the generic assignment of which was uncertain or as yet unsettled. Both binomina are *nomina nuda* and *Cystidea* Barrande, 1867, is not an available generic name.

3. Barrande (1868, p. 694) published the binomen *Cystidea bavarica* for some cystoid fragments from Hof in Bavaria. This time, however, the binomen was accompanied by a description and *Cystidea* Barrande becomes available from this date. Barrande again expressly stated that *Cystidea* was not intended as a generic name:

" Wir kennen bloss die zwei abgebildeten Plättchen, nach welchen es gewagt sein würde, dieser Art einem Gattungsnamen zu geben." Barrande, 1868, p. 694.

4. Barrande (1887, pp. 82, 179–180, 188) again used *Cystidea* as a collective group name and added eight species each accompanied by a description and figure. He identified *Cystidea sedgwicki* Barrande, 1867, as *Dendrocystites sedgwicki* Barrande, 1887, (Barrande 1887, p. 142) but *Cystidea bohemicus* Barrande, 1867, was not identified. However, from the information given in the passage first quoted, it is evident that *Cystidea bohemicus* Barrande, 1867, became either *Aristocystites bohemicus* Barrande, 1887, or *Craterina bohemicus* Barrande, 1887 [= *Codiacystis bohemicus* (Barrande)]. The former is more likely.

5. Haeckel (1896, p. 152) used the binomen *Cystidea dubia* to describe some indeterminate plates figured by Barrande (1887, pl. 14, figs. 24–33) as " Plaquettes d'origine douteuse."

6. *Cystidea* Barrande, 1867, is a *nomen nudum*. *Cystidea* Barrande, 1868, although intended as a collective group name, contained only one species, *Cystidea bavarica* Barrande, 1868, which would become type-species by monotypy if *Cystidea* Barrande, 1868, were accepted as an available generic name. Although no author has accepted *Cystidea* as such there seems to be no reason to reject it. *Cystidea* Barrande, 1868, satisfies all the requirements of Article 11 of the règles and, despite its original author's intentions, constitutes a valid generic name as far as I can determine.

7. Callaway (1877, p. 670) described a new cystoid, *Macrocystella mariae* Callaway, from the Shineton Shales of Shropshire, England. *M. mariae* Callaway is the type-species of the genus *Macrocystella* Callaway, 1877, by monotypy.

8. Barrande (1887, p. 163) proposed a new genus *Mimocystites* type-species *Mimocystites bohemicus* Barrande, 1887.

9. Pompeckj (1896), p. 90 assigned *Cystidea bavarica* Barrande, 1868, to the genus *Macrocystella* Callaway, 1877, as did Sdzuy tentatively (1955, p. 270). Pompeckj further suggested that *Macrocystella* Callaway, 1877, and *Mimocystites* Barrande, 1887, were synonymous.

10. Bather (1899, p. 920) proposed the family MACROCYSTELLIDAE of which *Macrocystella* Callaway, 1877, is type-genus.

11. Pompeckj (1896, p. 90), Jaekel (1899, p. 171), Bather (1900, p. 56), and Cuénot (1953, p. 619), have all suggested that *Mimocystites* Barrande, 1887, and *Macrocystella* Callaway, 1877, are very closely related or perhaps identical. Those authors who refrained from accepting the former as a junior synonym of the latter did so partly because *Macrocystella mariae* Callaway, 1877, type-species of *Macrocystella*, was inadequately described and partly because Bather (1900, fig. 18) published an inaccurate reconstruction. Sdzuy (1955) was further misled by an inaccurate plate diagram published by Moore (1954) but concluded that the two genera were only separable *if* published figures were accurate. A redescription of *Macrocystella mariae* Callaway has now been given (Paul, 1967). In my opinion there is no doubt that *Cystidea bavarica* Barrande, 1868, *Macrocystella mariae* Callaway, 1877, and *Mimocystites bohemicus* Barrande, 1887, are congeneric and strict application of the law of priority would require that *Cystidea* Barrande, 1868, be accepted as the valid name for this fossil echinoderm. *Cystidea bavarica* Barrande, 1868, is not a *nomen oblitum* as it was cited in that form by Bassler and Moodey (1943, p. 148) who were unaware that Pompeckj (1896) had referred it to *Macrocystella* Callaway. Bassler and Moodey also cited *Cystidea*, but as a collective group name not a formal generic name, and they attributed it to Barrande, 1887, despite listing the earlier usage (Barrande 1868).

12. Unnecessary confusion would result from the replacement of *Macrocystella* Callaway, 1877, by *Cystidea* Barrande, 1868. *Macrocystella* Callaway, 1877, has been widely used in the literature and has been described and figured in text books and general treatises both in Zoology and Palaeontology in

English, French and German. It would cause considerable confusion if this familiar name were replaced by *Cystidea* Barrande, 1868, particularly as species assigned to *Cystidea* as a collective group name have been re-assigned to different echinoderm classes.

13. Of the twelve forms ascribed to *Cystidea* by Barrande (1867, 1868, 1887) and Haeckel (1896) one (*Cystidea sedgwicki*) is a solute " carpoid," one (*Cystidea bohemicus*) a diploporite cystoid, and one (*Cystidea bavarica*) a rhombiferan cystoid. The remaining nine have not subsequently been assigned to any recognizable genus. It is therefore suggested that the generic name *Cystidea* Barrande, 1886, be suppressed under the plenary powers. This would leave nine as yet unrecognizable " species " without an available generic name. However, it is still possible that all nine will be assigned to valid genera as their characters become better known. The alternative course of retaining *Cystidea* Barrande, 1868, will still leave these forms without an avilable generic name as they are clearly not congeneric with *Cystidea bavarica* Barrande, 1868.

14. The International Commission is therefore requested:

(1) to use its plenary powers to suppress the generic name *Cystidea* Barrande, 1868, for the purposes of the law of priority but not for those of the Law of Homonymy;

(2) to place the generic name *Macrocystella* Callaway, 1877 (gender : feminine), type-species, by monotypy, *Macrocystella mariae* Callaway, 1877, on the Official List of Generic Names in Zoology.

(3) to place the specific name *mariae* Callaway, 1877, as published in the binomen *Macrocystella mariae* (type-species of *Macrocystella* Callaway, 1877) on the Official List of Specific Names in Zoology.

(4) to place the specific name *bavarica* Barrande, 1868, as published in the binomen *Cystidea bavarica*, on the Official List of Specific Names in Zoology.

(5) to place the family-group name MACROCYSTELLIDAE Bather, 1899 (type-genus *Macrocystella* Callaway, 1877) on the Official List of Family-group Names in Zoology.

(6) to place the generic name *Cystidea* Barrande, 1868 (as suppressed under the plenary powers in (1) above), on the Official Index of Rejected or Invalid Names in Zoology.

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PACHYRHYNCHUS GERMAR, 1824 (INSECTA, COLEOPTERA): PROPOSED CONSERVATION BY SUPPRESSION OF *PACHYRHYNCHUS* WAGLER, 1822 (AVES, PASSERIFORMES). Z.N.(S.) 1815

By Elwood C. Zimmerman[1] (*Bishop Museum, Honolulu, Hawaii*)

The well known name *Pachyrhynchus* Germar, 1824, proposed for a large group of Pacific Curculionidae (weevils), is a homonym of *Pachyrhynchus* Wagler, 1822, which was erected (in a very rare publication) for a South American bird. It would be most unfortunate if a new name had to be used for *Pachyrhynchus* Germar in the Insecta, because more than 100 species-group names are associated with it, it is widely known in literature (including literature on economic entomology, zoogeography and mimicry), and it is the type-genus of the tribe PACHYRHYNCHINI which is one of the most unusual groups of the CURCULIONIDAE. *Pachyrhynchus* Wagler, however, is a junior synonym of *Tityra* Vieillot, 1816, a genus in use today which is not involved in any homonymy, and it has the same type-species. Because it is used only in junior synonymy, its suppression would cause no inconvenience or confusion, and no useful purpose would be served by its conservation and the then necessary suppression of the name as widely used in the Insecta. Should *Pachyrhynchus* not remain available in the Insecta, then a new name will have to be erected for it and the name of the tribe PACHYRHYNCHINI will have to be changed. Following is a summary of pertinent details:

TITYRA Vieillot, 1816, *Analyse*, p. 39. Type-species, by monotypy:

Lanius cayanus Linnaeus.

=*Pachyrhynchus* Wagler, 1822, in Hahn, *Vögel Aus Asien, Africa, America & Neuholland* . . ., Liefr. 13, col. 6, and text (unnumbered page) to the plate. Type-species, by monotypy: (*Pachyrhynchus melanocephalus* Wagler, same reference) =*Lanius cayanus* Linnaeus.

PACHYRHYNCHUS Germar, 1824, *Insectorum Species Novae aut Minus Cognitae* . . ., p. 336. Type-species, by monotypy: *Pachyrhynchus moniliferus* Germar, same reference, pl. 1, fig. 12.

In the interest of stability and avoidance of confusion, the Commission is asked:

(1) to use its plenary powers to suppress the generic name *Pachyrhynchus* Wagler, 1822, for the purposes of both the Law of Priority and the Law of Homonymy;

(2) to place the generic name *Pachyrhynchus* Germar, 1824 (gender : masculine), type-species, by monotypy, *Pachyrhynchus moniliferus* Germar, 1824, on the Official List of Generic Names in Zoology;

[1] This is number 12 of a series of reports resulting from studies made possible by National Science Foundation Grant G-18933.

(3) to place the specific name *moniliferus* Germar, 1824, as published in the binomen *Pachyrhynchus moniliferus*, on the Official List of Specific Names in Zoology;

(4) to place the family-group name PACHYRHYNCHINI (Schoenherr, 1826, *Curculionidum Dispositio Methodica* . . ., p. 88, as PACHYRHYNCHIDES) (type-genus : *Pachyrhynchus* Germar) on the Official List of Family-Group Names in Zoology;

(5) to place the generic name *Pachyrhynchus* Wagler, 1822, on the Official Index of Rejected and Invalid Generic Names in Zoology.

LASIOPTERA MEIGEN, 1818: APPLICATION TO PRESERVE THE GENERIC NAME IN ITS ACCUSTOMED MEANING (DIPTERA, CECIDOMYIIDAE). Z.N.(S.) 1822

By Curtis W. Sabrosky and Raymond J. Gagné (*Entomology Research Division, Agr. Res. Serv., U.S. Department of Agriculture, Washington, D.C., U.S.A.*)

A long-overlooked type designation threatens to cause serious confusion in the economically important genus *Lasioptera* in the gall midges of the dipterous family CECIDOMYIIDAE. Use of the plenary powers is requested to preserve the name in its long established meaning.

2. The genus *Lasioptera* was proposed by Meigen (1818 : 88) with eight included species, arranged in three groups:

A. Four species (very short basitarsus), including *L. picta* Meigen and *L. albipennis* (Meigen, 1804).

B. Three species (elongated basitarsus), one or perhaps two of them doubtfully referred to the genus.

C. One species (unassigned to A or B), *L. juniperina* (Linnaeus, 1758).

3. No type-species was designated. Authors gradually confined *Lasioptera* to Meigen's group A, and modern authors followed this and cited Coquillett's designation of *albipennis* as the type-species (1910 : 558). This was also accepted in the new " Catalog of the Diptera of America North of Mexico " (Stone *et al.*, 1965 : 270), but in a list of corrections to that Catalog, Sabrosky (1967 : 118) has recently pointed out the long-overlooked designation of *L. picta* Meigen by Karsch (1878 : 14). Fortunately, the two species *L. picta* and *L. albipennis* are congeneric, and this change causes no difficulty.

4. Now it has been discovered—surprisingly so in view of the prominence of Rondani in dipterology—that there is yet another overlooked designation for *Lasioptera*, still earlier than that of Karsch. In 1860 : 291, Rondani designated as type-species *Tipula juniperina* Linnaeus (as " *Tuniperina* ", an obvious typographical error). This was already the type-species, by monotypy, of *Oligotrophus* Latreille (1805), another important genus in the CECIDOMYIIDAE. The consequences of acceptance of Rondani's designation would be (1) to synonymize *Lasioptera*, one of the oldest and best known genera in the family and the type-genus of tribe LASIOPTERINI and supertribe LASIOPTERIDI, under *Oligotrophus*, itself the type-genus of a tribe OLIGOTROPHINI and supertribe OLIGOTROPHIDI, and (2) to require another name for the *Lasioptera* of authors recognized since 1818 and for the tribe and supertribe based upon it.

5. Search for a replacement name for *Lasioptera*, if that were decided upon, would lead one into further problems. An obvious candidate would be *Diomyza*, a Megerle manuscript name cited by Meigen under *Lasioptera* (1818 : 88) and in two manuscript names for species, one each under *L. picta* and *L. fusca* (: 89). It was adopted by Stephens (1829a : 53; 1829b : 240), who cited Megerle as author and listed three nomina nuda, and by Stephens (1846 : 21), who doubtfully referred to it *Lasioptera pulchra* Meigen (1830).

Westwood (1840 : 126) recognized the genus *Diomyza* (again with Megerle as author), gave a brief description, and cited as type-species *D. fuliginosa* Stephens (plate 42, fig. 4). The plate reference refers to Stephens (1846), but there the figure is actually called " *D. pulchra*? ". *D. fuliginosa* is a *nomen nudum* from Stephens (1829a, b) but it is made available by Westwood, by indication (bibliographic reference to the excellent coloured figure in Stephens, 1846). Obviously then, the name *Diomyza* has been " treated as an available name with its original date and authorship " and " adopted as the name of a taxon " (Code, 1964, Art. 11d), and must be treated as available. Incidentally it has rarely been used, and then not always correctly. For example, Schiner (1864 : 410) credited *Diomyza* to Stephens and claimed to use it in his sense (elongated basitarsus) for the species of Meigen's " B " group, but Schiner misinterpreted Stephen's excellent coloured figure, which is actually a true *Lasioptera* of Meigen's " A " group (abbreviated basitarsus).

6. If *Diomyza* be considered to replace *Lasioptera*, one faces the question of the type-species of a generic name in synonymy. Some have interpreted it as (1) automatically the type of the name under which it is synonymized (objective synonymy), (2) automatically, by considering the senior name as a replacement for the manuscript synonym, the type-species of either when established (Art. 67i), or (3) the species with which it is specifically associated in the publication in which it first appeared. Under the first two interpretations the type-species would be that of *Lasioptera*, hence *juniperina* by designation of Rondani (1860), thus involving *Diomyza* in the same difficulty as *Lasioptera*. Under the third interpretation, *Diomyza* was specifically associated with *L. picta* and *L. fusca*. Coquillett (1910 : 533) stated that the type was *picta*, and this could be recognized as designation even though his reason (monotypy) was erroneous (Art. 69a (iii)).

7. After considering the various difficulties, the threatened change of a long-established name to a new meaning and its replacement by a long buried name that in itself has problems, we conclude that the best solution would be to set aside the overlooked designation by Rondani.

8. Accordingly, the International Commission is requested to take the following actions:

(1) For the nominal genus *Lasioptera* Meigen, to use its plenary powers to set aside the type designation by Rondani (1860) and any others that may conflict prior to that of Karsch (1878), and to fix that of Karsch as the valid type designation;

(2) to place on the Official List of Generic Names in Zoology the generic name *Lasioptera* Meigen, 1818 (gender : feminine), type-species, by designation of Karsch, 1878 (accepted under the plenary powers), *Lasioptera picta* Meigen;

(3) to place the specific name *picta* Meigen, 1818, as published in the binomen *Lasioptera picta* Meigen (type-species of *Lasioptera* Meigen), on the Official List of Specific Names in Zoology.

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EPIRHEXIS COPE, 1866 (AMPHIBIA: SALIENTIA): REQUEST FOR SUPPRESSION UNDER THE PLENARY POWERS. Z.N.(S.) 1824

By John D. Lynch (*Museum of Natural History, University of Kansas, Lawrence, Kansas, 66044, U.S.A.*)

Baird (1859) named *Batrachyla longipes* on the basis of a single specimen (now lost) collected 40 leagues north of Mexico City. Cope (1866) diagnosed a new genus, *Epirhexis*, with *Batrachyla longipes* as the type-species. Boulenger (1882) placed *B. longipes* in the status of *species inquirenda* in his catalogue and was followed by Nieden (1923). Barbour (1923) and Kellogg (1932) placed the species in the genus *Eleutherodactylus*; they based their conclusions on a misidentified specimen (Taylor, 1940 *a*). Lynch (1963) in pointing out certain errors in the figures of *Batrachyla longipes*, concluded that little, if any, faith could be placed in the accuracy of the original figures (the figures serve as the sole indication) and that the name should be regarded as a *nomen dubium*.

In the course of reviewing *Syrrhophus*, geographic variation in *S. latodactylus* was observed. This variation had been earlier noted in the original description by Taylor (1940 *b*). The southern populations are unlike other *Syrrhophus* in having dorsal patterns of large blotches, whereas other species of the genus have flecked or punctate patterns (Firschein, 1954). *Batrachyla longipes* and *Syrrhophus latodactylus* (from the southern part of its range) share the following characteristics: the dorsal colour pattern consists of large blotches or spots; vomerine teeth are present; and the digital tips are expanded. The type-locality of *Batrachyla longipes*, " 40 leagues N Mexico," probably is in northwestern Hidalgo, Mexico, near localities where *Syrrhophus latodactylus* is found.

Syrrhophus, as defined by Firschein (1954) would not accommodate *Batrachyla longipes*, and therefore, Lynch (1963) suggested that *B. longipes* be regarded as a *nomen dubium*. Lynch (1967) redefined the ill-defined genus *Syrrhophus* and, as presently defined, *Syrrhophus* would include *Batrachyla longipes*. No evidence is available to suggest that *Syrrhophus latodactylus* and *Batrachyla longipes* are not conspecific, whereas considerable evidence suggests that they are conspecific. The argument of Lynch (1963) that *B. longipes* be regarded as a *nomen dubium* is therefore rejected.

Inclusion of *Batrachyla longipes* in the generic group called *Syrrhophus* poses a problem in that *Epirhexis* Cope, 1866 (type-species by original designation *Batrachyla longipes* Baird), has priority over, and must replace, *Syrrhophus* Cope, 1878 (type-species by monotypy *Syrrhophus marnockii* Cope, 1878). *Epirhexis* received comment (or mention) as a senior name only four times in the literature (Cope, 1866, 1875, 1887, 1889) and has been universally regarded as a generic synonym of *Eleutherodactylus* since 1923. *Syrrhophus* has received considerable comment during the last 70 years and is well entrenched in the zoological literature, inasmuch as it was used in such compilations and monographic studies as those of Gorham (1966), Gunther (1900),

Kellogg (1932), Nieden (1923), Noble (1931), and Smith and Taylor (1948). Serious confusion and instability would be generated by the replacing of the well-established name *Syrrhophus* with the little known *Epirhexis*.

Syrrhophus latodactylus is an uncommon species of frog occurring on the Caribbean slopes of eastern Mexico; because of its rarity it has received little attention in the literature. The name *Batrachyla longipes*, has received equal, if not more, comment than *Syrrhophus latodactylus* but under the name *Eleutherodactylus longipes*. The geographic variation within the species is such that in the future other workers may wish to apply subspecific names to the northern and southern populations. The type-locality of *Syrrhophus latodactylus* is near the northern limits of the species range and that of *Batrachyla longipes* near the southern limit. Little confusion would result from use of the combination *Syrrhophus longipes* as the name of the species currently known as *S. latodactylus* and, if, in the future, subspecific names were to be applied, names would be available for each end of the cline.

Three alternatives are available:

(A) application of the Law of Priority, replacing *Syrrhophus* Cope, 1878, with *Epirhexis* Cope, 1866, and replacing *Syrrhophus latodactylus* Taylor, 1940, with *Batrachyla longipes* Baird, 1859; or

(B) suppression of the generic name *Epirhexis* Cope, 1866, and the specific name *longipes*, used in the combination *Batrachyla longipes* by Baird (1859), thus preserving *Syrrhophus* Cope, 1878, and *S. latodactylus* Taylor, 1940; or

(C) suppression of the generic name *Epirhexis* Cope, 1866, while preserving the specific name *longipes*, used in the combination *Batrachyla longipes* by Baird (1859) thus preserving *Syrrhophus* Cope, 1878, and eliminating the need (should such arise) of providing a new name for the southern population.

Alternative (A) would promote a situation of instability as argued above. The second and third alternatives both have merit in preserving *Syrrhophus* Cope, 1878, and differ only in preserving (or not) the specific name *longipes*, as used in the combination *Batrachyla longipes*. *Batrachyla longipes* was the first name applied to any of the dozen known species of *Syrrhophus* and its preservation would thus not upset any present classification other than the name for the species now called *S. latodactylus*. As pointed out above, the possibility exists for recognizing two subspecies in this species (although this author does not feel such would be of value). Retention of the specific name *longipes* would eliminate the need of proposing a new name for the southern population (should such need arise).

Accordingly, I now request the Commission:

(1) to use its plenary powers to suppress the generic name *Epirhexis* Cope, 1866 (type-species by original designation *Batrachyla longipes* Baird, 1859) for the purposes of the Law of Priority but not for those of the Law of Homonymy;

(2) to place the generic name suppressed under the plenary powers in (1) on the Official Index of Rejected and Invalid Generic Names in Zoology;

(3) to place the generic name *Syrrhophus* Cope, 1878 (gender : masculine), type-species, by monotypy, *Syrrhophus marnockii* Cope, 1878, on the Official List of Generic Names in Zoology;

(4) to place the following specific names on the Official List of Specific Names in Zoology;

(a) *marnockii* Cope, 1878, as published in the binomen *Syrrhophus marnockii* (type-species of *Syrrhophus* Cope, 1878);

(b) *longipes* Baird, 1859, as published in the binomen *Batrachyla longipes*.

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ESCHARA SPONGITES PALLAS, 1766 (BRYOZOA): PROPOSED DESIGNATION OF A NEOTYPE UNDER THE PLENARY POWERS. Z.N.(S.) 1826

By the late H. Dighton Thomas and Anna B. Hastings
(*British Museum (Natural History), London*)

1. The name *Stylopoma* was introduced by Levinsen in 1909 in the explanation of Plate XVIII and in the legend to that plate. In the former the two species assigned to *Stylopoma* are referred to as *Schizoporella* (*Stylopoma*) *longirostris* Hincks and *Schizoporella* (*St.*) *spongites* (Pallas), whereas in the latter they are given as *Stylopoma longirostris* Hincks and *St. spongites* Pall., respectively. Whether Levinsen intended the name as a subgenus of *Schizoporella* Hincks by his use of parentheses in the explanation of Plate XVIII is not clear, as he used parentheses apparently with an entirely different meaning in other parts of the work, e.g., *Electra* (*Heteroecium*) *amplectens* Hincks on p. 147 and in the explanation of Plate IX, and *Catenaria* (*Vittaticella*) *elegans* (Busk), *Catenaria* (*Vittat.*) *fusca* (MacGilliv.) and *Catenaria* (*Vittat.*) *cornuta* (Busk) in the explanation of Plate XIII—in these instances it is probable that the name in parentheses indicates that it is a synonym. This, however, could not have been Levinsen's intention with regard to *Stylopoma* and *Schizoporella*. In the legend to Plate XVIII the name is given full generic rank.

2. The type-species of *Stylopoma*, chosen from the two originally included species by Canu and Bassler (1920, p. 359), is *Eschara spongites* Pallas, 1766, p. 45.

3. Pallas (p. 46) gave the localities from which the species came as " Mare Mediterraneum & Americanum ".

4. Although Harmer (1930, p. 79) has pointed out that Pallas included several species in *Eschara spongites*, Pallas gave a good description of a Mediterranean specimen in the " Museo Serenissimi Principis Auriaci " and commented that the specimen figured by Gualtieri (1742, figure after Title of Pt. iv) was very similar to it in its character. Pallas's remarks (p. 47) on the American specimens indicate that they belonged to other species (cf Harmer, 1930, p. 79 —" The American specimens included probably belonged to other species ").

5. In the hundred years following Pallas, several authors used his specific name *spongites*, either combined with *Eschara*, *Cellepora* or *Millepora*, for Mediterranean material (see Jelly, 1889, p. 234).

6. Smitt (1873, p. 42, pl. 8, figs. 161–163) used the name *spongites*, as *Hippothoa spongites*, for a species from Florida.

7. Waters (1909, p. 144), treating his own species *Lepralia errata* (1878, p. 11), *L. errata*, stadium *Hemeschara* (1879, p. 39, pl. 10, fig. 5), from the Bay of Naples, as a variety of *Schizoporella unicornis* (Johnston), noted that it " is what Pallas described as *Eschara spongites* " and that it " is not the *S. spongites* of Smitt, Hincks and Thornely ". [Harmer, (1957, pp. 1035, 1034) referred the Hincks and Thornely material to *Stylopoma parviporosum* (Canu and Bassler) and *S. duboisii* (Audouin), respectively.]

8. Later in the same year (1909, p. 324) Levinsen re-described Smitt's species and introduced the name *Stylopoma* (see paragraph 1, above). Although he referred to the species as *Schizoporella spongites* (Pallas) Smitt, he did not restrict the name *spongites* to the American material, but included a specimen from Aor, Malacca, Burma, (p. 325) and one from Java (pl. XVIII, fig. 4d).

9. By 1918, Waters (p. 17) recognized that *Eschara spongites* Pallas involved three species, namely, (a) *Schizoporella unicornis* forma *errata* (Waters) [=*Lepralia errata* Waters, an erect form], (b) *S. sanguinea* Norman, another Mediterranean but encrusting species, and (c) the American *S. spongites* of Smitt and Levinsen. He suggested that, as " the first two species are well known under other names " [i.e., later names], *spongites* should be applied to the American species. However, he made no designation of a type-specimen.

10. Osburn (1914, p. 207), Canu and Bassler (1920, p. 359; 1930, p. 40), and Hastings (1930, p. 721) used *spongites* for the American species.

11. Pallas not only included Gualtieri's figure of *Porus Anguinus* . . . in his synonymy of *Eschara spongites*, but he also commented on the *specimen* in his remarks (see paragraph 4, above). Thus, in accordance with Article 74b of the International Rules of Zoological Nomenclature, Harmer's choice (1930, p. 80) of Gualtieri's figure as type of the species appears to be valid—Harmer wrote, " Pallas' citation of Gualtieri makes it possible, however, to retain his name in the sense usually accepted; and Gualtieri's figure is thus to be regarded as the type of *Eschara spongites* ". The later statement of Hastings (1932, p. 420) that " The genotype of *Stylopoma* is the W. Indian species figured by Levinsen " is incorrect.

12. The name *Stylopoma spongites* (Pallas) is thus restricted to the Mediterranean form, and is not available for the American species.

13. Hastings (1932, p. 420), Marcus (1937, p. 91; 1955, p. 296) and Osburn (1940, p. 424; 1947, p. 29; 1952, p. 336), accepted Harmer's restriction of the name to the Mediterranean species. Following the suggestion of Canu and Bassler (1923, p. 102), they placed the Recent American species in the synonymy of *Cellepora informata* Lonsdale (1845, p. 505, 2 figs.), using the combination *Stylopoma informata* (Lonsdale).

14. Cheetham and Sandberg (1964, p. 1030) stated the nomenclatorial problems of both *Stylopoma* and *Eschara spongites*, and gave reasons (p. 1031) for rejecting the synonymy of the Recent American species with *Cellepora informata*.

15. It appears from the foregoing that the choice by Harmer (1930) of a Mediterranean lectotype for *Eschara spongites* Pallas was strictly lawful, but invalidates current usages as follows:

i. of the genus *Stylopoma* Levinsen for a distinctive group of species.

ii. of the name *Stylopoma spongites* (Pallas) for a well-known American (warm Atlantic) species.

iii. of the name *Schizoporella errata* (Waters) for a common Mediterranean and ship-fouling species.

16. By rejecting Harmer's selection and choosing a specimen of the American species as neotype of *Eschara spongites* Pallas, these usages would all remain undisturbed.

17. Moreover, as the Mediterranean species is also known from the American coast (certain records of *Schizoporella unicornis* being based on *S. errata*), this course would avoid the transference of the name *spongites* from one American species to another.

18. We, therefore, ask the International Commission on Zoological Nomenclature:

(1) to use its plenary powers to set aside all designations of a type-specimen for *Eschara spongites* Pallas 1766, made prior to the Ruling now requested, and having done so, to designate:
  (a) Levinsen's dry specimen from St. Jean (St. John) Bay, W. Indies, 10 fath., in Universitetets Museum, Copenhagen, redescribed by Hastings (in press), as neotype of *Eschara spongites* Pallas;
  (b) Levinsen's spirit specimen from St. Jean (St. John), W. Indies, in the same museum and redescribed by Hastings, as neoparatype of *Eschara spongites* Pallas;

(2) to place the following specific names on to the Official List of Specific Names in Zoology:
  (a) *spongites* Pallas, 1766, as published in the binomen *Eschara spongites* (type-species of *Stylopoma* Levinsen, 1909);
  (b) *errata* Waters, 1878, as published in the binomen *Lepralia errata*;

(3) to place the generic name *Stylopoma* Levinsen, 1909, (gender : neuter), type-species, chosen by Canu and Bassler, 1920, p. 45, *Eschara spongites* Pallas, 1766, on to the Official List of Generic Names in Zoology.

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POLANISA WALKER, 1875 (INSECTA, HYMENOPTERA): PROPOSED SUPPRESSION UNDER THE PLENARY POWERS. Z.N.(S.) 1829

By J. T. Wiebes (*Rijksmuseum van Natuurlijke Historie, Leiden, Netherlands*)

The object of the present application is to ask the International Commission on Zoological Nomenclature to suppress under its plenary powers the generic name *Polanisa* Walker, 1875, thus preventing a possible replacement of the generic name of the species now known as *Philotrypesis* Förster, 1878, which is a subjective junior synonym of *Polanisa* Walker.

2. Walker (1871, *Notes on Chalcidiae* **4** : 62) described *Idarnes transiens*, " observed in the figs of Ficus Indica, in Hindostan, by Sir Walter Elliott ". This species was subsequently listed as *Idarnella transiens* by Westwood (1883, *Trans. ent. Soc. London* : 37), *Idarnella* being proposed by Westwood as a new, monotypic genus for *Idarnes transiens* Walker; as *Polanisa transiens* by Patton (1884, *Proc. ent. Soc. London* : xvi; see below); and as *Philotrypesis transiens* by Grandi (1921, *Boll. Lab. Zool. Portici* **15** : 95–102, 184; 1930, *Boll. Lab. Ent. Bologna* **3** : 51–56, 168–171, 175), and by Wiebes (1966, *Zool. Verh.* **83** : 11; 1966, *Tijdschr. Ent.* **109** : 165).

3. In 1875, in a posthumous paper by Walker (1875, *Entomologist* **8** : 15–18), several insects were described, " destructive to the fig in India ", among which was *Polanisa lutea* Walker (p. 18). According to Patton (loc. cit.) these posthumous descriptions were taken from notes made prior to Walker's publication of 1871, and they were based on the same material. Thus, Patton synonymized *Idarnes transiens* and *Polanisa lutea*, and used the combination *Polanisa transiens*.

4. Förster (1878, *Ver. naturh. Ver. preus. Rheinl.* **35** : 59–60) erected the genus *Philotrypesis*. This generic name has since been used for some thirty species of Torymidae, including the well-known parasite of the Edible Fig, and there is an extensive literature in which the name *Philotrypesis* has been consistently employed (e.g. the monographs by Grandi, mentioned above; Joseph, 1958, *Ann. Sci. nat.*, Zool. (11) **20** : 197–260; and several more papers dealing with the economic importance of this insect). Moreover, it has been taken as the basis of a family-group name (PHILOTRYPINI Wiebes, 1966, *Zool. Meded.* **41** : 154). *Philotrypesis* Förster, 1878, was placed on the Official List of Generic Names in Zoology (no. 1578); see China (1962, *Bull. zool. Nomencl.* **19** : 160–163) for particulars.

5. Ashmead (1904, *Mem. Carnegie Mus.* **1** : 378, 386), by synonymizing *Idarnella* Westwood and *Philotrypesis* Förster, and at the same time, erroneously, listing *Idarnes transiens* as the type of *Polanisa* Walker, implicitly accepted the synonymy of *Polanisa* Walker and *Philotrypesis* Förster. So did Hoffmeyer (1930, *Ent. Medd.* **17** : 224), but in 1933 (*Ent. Medd.* **18** : 249) he accepted Grandi's conclusion that *Polanisa* Walker " must for ever be standing as a doubtful (invalid) genus ". This was also suggested by China (loc. cit.), in answer to my proposal to suppress *Polanisa* Walker.

6. In a forthcoming paper (Wiebes, 1967, in press), I designate a female from " Murutt. Sir W. Elliott. BM 81–107 " lectotype of both *Idarnes transiens* Walker, 1871, and *Polanisa lutea* Walker, 1875. Thus *Polanisa* is no longer a nomen dubium, but a senior, subjective synonym of *Philotrypesis*.

7. Similar cases arise in many other of Walker's names, but in most instances, nomenclatorial confusion by adhering to the Law of Priority is too slight to warrant conservation of the younger name. As the replacement of *Philotrypesis* by *Polanisa*, however, will cause much confusion in both taxonomic and applied literature on fig wasps, the International Commission on Zoological Nomenclature is now asked:

(1) to use its plenary powers to suppress the generic name *Polanisa* Walker, 1875, for the purposes of the Law of Priority but not for those of the Law of Homonymy;

(2) to place *Polanisa* Walker, 1875, as suppressed under the plenary powers in (1) above, on the Official Index of Rejected and Invalid Generic Names in Zoology.

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THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

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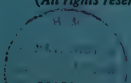

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BULLETIN OF ZOOLOGICAL NOMENCLATURE

Volume 24, Part 6 (pp. 321–384, T.P.–XI) 18*th January* 1963

NOTICES

(a) *Date of Commencement of Voting.*—In normal circumstances the Commission starts to vote on applications published in the *Bulletin of Zoological Nomenclature* six months after the publication of each application. Any zoologist who wishes to comment on any of the applications in the present part is invited to send his contribution, in duplicate, to the Secretariat of the Commission as quickly as possible, and in any case in time to reach the Secretariat before the close of the six-month period.

(b) *Possible use of the Plenary Powers.*—The possible use by the Commission of its plenary powers is involved in the following applications published in the present part of the *Bulletin:*

(1) Designation of a neotype for *Cellularia salicornia* Pallas, 1766; Suppression of OR designation of a neotype for *Eschara fistulosa* Linnaeus, 1758; Suppression of *Cellaria farciminoides* Ellis & Solander, 1786; Designation of type-species of *Cellaria* Ellis & Solander, 1786; Suppression of OR designation of a neotype for *Cellaria salicornioides* Lamouroux, 1816 (Polyzoa). Z.N.(S.)1814.

(2) Suppression of *Elipesurus* and *Elipesurus spinicauda* Schomburgk, 1843 (Pisces). Z.N.(S.) 1825.

(3) Designation of a type-species for *Solenius* Lepeletier & Brullé, 1834 (Insecta, Hymenoptera). Z.N.(S.) 1827.

(4) Emendation to *Liphistius* of *Lipistius* Schiodte, 1849 (Araneae). Z.N. (S.) 1828.

(5) Designation of a type-species for *Bollia* Jones & Holl, 1886 (Ostracoda). Z.N.(S.) 1831.

c/o British Museum (Natural History),
Cromwell Road,
London, S.W.7, England.
November 1967

W. E. CHINA
Acting Secretary,
International Commission on
Zoological Nomenclature

COMMENTS ON THE PROPOSED SUPPRESSION OF *NEMATUS LEACHII* DAHLBOM, 1835. (Z.N.(S.) 1778

(see volume 24, page 95)

By J. Muldrew, R. J. Heron, W. G. H. Ives, C. H. Buckner, W. J. Turnock, F. W. Quednau, and H. E. Coppel (*Department of Forestry & Rural Development, Canada*)

We strongly support the motion for the suppression of the name *Nematus leachii* Dahlbom as recommended by Benson and Wong on the grounds given by these authors and in particular because of the extensive usage of "*erichsonii*", both in North America and Europe, in numerous scientific papers, pamphlets and textbooks. The latter name is so well known for this species that a great deal of confusion would result if it were to be changed at this time. In addition a species of *Pristiphora* that also feeds on *Larix* was given the specific name "*leechi*" by Wong and Ross (*Can. Ent.* **92** (3) : 193, 1960). Because of the similarity in spelling between this and "*leachii*", considerable confusion would occur if the latter name is designated as the correct specific name for the larch sawfly.

By H. Pschorn-Walcher and O. Eichhorn (*Commonwealth Institute of Biological Control, Delémont, Switzerland*)

We strongly support the motion for the suppression of the name *Nematus leachii* Dahlbom as recommended by Benson and Wong. The name *Pristiphora erichsonii* has been used so extensively that its replacement by a completely unknown name would cause a great deal of confusion. It should also be pointed out that—although likely—it is not 100 per cent sure that the description of a gregarious sawfly larva on larch by Dahlbom refers to *P. erichsonii* as we recently discovered a second species in Europe whose larvae feed gregariously on larch trees (compare Pschorn-Walcher & Eichhorn, 1963, *Techn. Bull. C.I.B.C.*: 51–82).

COMMENT ON THE PROPOSED ADDITION TO THE OFFICIAL LIST OF SCUTELLUIDAE RICHTER & RICHTER, 1925 (TRILOBITA). Z.N.(S.) 1789

(see volume 24, pages 230–233)

By J. Stubblefield (*London*)

The above-named application draws attention to two causes of nomenclatorial annoyance—homonymy or rather partial homonymy of genera in different phyla and the confusion caused by reviving nomina oblita.

There are two generic taxa, one an echinoid and the other a trilobite, which were similarly named; the echinoid was called *Scutella* Lamarck, 1816, being accorded a feminine name termination, and the trilobite name *Scutellum* Pusch, 1833, received a neuter name ending. The echinoid name shortly gave origin to a family name SCUTELLIDAE Gray, 1825, but the trilobite name slept forgotten for nearly a hundred years and the trilobite genus itself was successively named *Brontes* Goldfuss, 1839, *Goldius* de Koninck, 1839, and *Bronteus* (replacement name for *Brontes* pre-occupied) Goldfuss, 1844. Then in 1925 R. & E. Richter not only revived *Scutellum* Pusch but made it the basis of a family name SCUTELLIDAE. C. Poulsen (1934) appears to have been the first to indicate to trilobite workers that the family name SCUTELLIDAE already existed for echinoids and the solution that he recommended was to revive the family name GOLDIIDAE for the trilobites. Stubblefield (1936) noticed these troubles and recommended the suppression of the long disused name *Scutellum* and now, in hindsight, he regrets that he made no such proposal then to the International Commission; such a proposal now would be too belated to have any merit.

When the authorship of the systematic portions of the Trilobita volume of the Treatise on Invertebrate Palaeontology was being considered, this particular trilobite family was assigned to R. & E. Richter for treatment and I drew their attention to the anomalous family name. The result was that in 1955 they proposed the name SCUTELLUIDAE which, as Erben & Whittington (1967 : 231) rightly affirm, serves a purpose that appears to be in accord with the intent of the subsequently published Article 55a of the International Code of Zoological Nomenclature adopted by the XVth ICZ. Emma Richter died in 1956 and Rudolf in 1957 but their contribution to the Treatise was submitted posthumously to the Editor-in-Chief under the family heading SCUTELLUIDAE. That name, however, was opposed and replaced by THYSANOPELTIDAE Hawle and Corda, 1847 "*nom. correct.* Moore, herein (*pro* THYSANOPELTIDES Hawle and Corda, 1847)".

This name THYSANOPELTIDES was itself a nomen oblitum and as stated by Erben & Whittington (1967 : 231) in the amended form THYSANOPELTIDAE, it has not yet received general acceptance to the exclusion of SCUTELLUIDAE. I therefore support Erben & Whittington in recommending that this name SCUTELLUIDAE be added to the Official List of Family-Group Names to avoid further confusion in Trilobite literature.

ADDITIONAL REFERENCES

POULEN, C. 1934. *Medd. Grønland*, **72** Anden Afd.: 34
STUBBLEFIELD, C. J. 1936. *Biological Reviews*, **11** : 436

INTERNATIONAL TRUST FOR ZOOLOGICAL NOMENCLATURE

FINANCIAL REPORT 1966

The financial result for 1966 is satisfactory. Under Expenditure, Administration is the same as last year, while printing costs for the Bulletin are less by £275, and Office Expenditure is up by £390 from the need to provide additional facilities for the storage of publications.

On the Income side, sales of the Bulletin are £400 higher and Interest is up by £130 due to the higher bank rate prevailing during 1966. There was also an UNESCO Grant of £356. As a result, the Income and Expenditure Account shows an excess of income for the year of £1,115.

It will be seen that for the first time for some years, there has been activity in the " Official List " Suspense Account due to the publication of the Second Instalment of the Lists. These were published late in the year and the return from sales is relatively small but will continue and, in accordance with practice, be credited to the Suspense Account.

INTERNATIONAL TRUST FOR

Incorporated under the Companies

BALANCE SHEET—

1965 £	£		£ s. d.	£ s. d.
		Revenue Reserves—		
10,000		General Reserve	10,000 0 0	
3,284		"Official List" Suspense Account (per separate account)	1,691 1 4	
4,098		Income and Expenditure Account (per separate account)	5,214 6 7	
17,382				16,905 7 11
		Special Donation unappropriated—		
252		Balance at 31st December, 1965		252 2 3
		Current Liabilities—		
1,029		Sundry Creditors	745 0 10	
142		Subscriptions to Publications received in advance ..	652 18 3	
1,171				1,397 19 1
£18,805				£18,555 9 3

REPORT OF

We have obtained the information and explanations which we considered necessary, and in our opinion
(1) The above balance sheet and annexed income and expenditure account gives a true and fair view of year ended on that date.
(2) Proper books have been kept and the accounts are in agreement therewith and give, in the prescribed

FINSBURY CIRCUS HOUSE,
BLOMFIELD STREET,
LONDON, E.C.2.
30th May, 1967

ZOOLOGICAL NOMENCLATURE

Act, 1929 (Limited by Guarantee)

31st December, 1966

1965 £	£		£ s. d.	£ s. d.
		Fixed Assets—		
		Office Equipment—		
	877	Book value at 1st July, 1948 and additions since at cost	979 14 6	
307	*570*	*Less* Depreciation and amount written off	611 10 6	368 4 0
		Investments at cost—		
	2,079	£2,500 2½% Savings Bonds 1964/67	2,078 10 6	
	5,689	£6,857 2*s* 11*d* British Transport 3% Stock 1968/73 ..	5,689 6 8	
	2,249	£2,500 6½% Exchequer Stock 1969	2,248 16 9	
	10,017	(£10,700) (Market Value at date £10,822)	10,016 13 11	
13,017	*3,000*	County Borough of Preston Temporary Loan	3,000 0 0	13,016 13 11
		Current Assets—		
	£		£ s. d.	
	90	Amounts due for Publications at valuation	664 10 6	
	38	Income Tax Recoverable ..	38 13 5	
	—	Selective Employment Tax Recoverable	30 12 6	
	128		733 16 5	
	5,353	Balances at Bank and Cash in Hand	4,436 14 11	
5,481				5,170 11 4
		(NOTE—The Stock of Publications has not been valued)		
£18,805				£18,555 9 3

FRANCIS J. GRIFFIN
N. D. RILEY
} Members of the Committee of Management

THE AUDITORS

the state of the Trust's affairs at 31st December, 1966 and of the excess of income over expenditure for the manner, the information required by the Companies Act, 1948.

W. B. KEEN & CO.,
Chartered Accountants

Income and Expenditure Account for

1965 £	£	EXPENDITURE	£ s. d.	£ s. d.
		Administration Expenses—		
3,671		Salaries, National Insurance, etc.	3,367 3 6	
848		Office Expenses	1,238 8 2	
53		Audit Fee	52 10 0	
4,572			4,658 1 8	
50		*Less* Proportion allocated to "Official List"	50 0 0	
4,522				4,608 1 8
34		Depreciation of Office Equipment		41 0 0
		Printing and Distribution of Publications—		
1,988		Bulletin of Zoological Nomenclature		1,714 14 8
6,544				6,363 16 4
659		Balance, being Excess of Income over Expenditure for the year, carried down		1,115 16 1
£7,203				£7,479 12 5
4,098		Balance carried forward to Balance Sheet		5,214 6 7
£4,098				£5,214 6 7

"Official List"

for the year ended

1965 £		£ s. d.
—	Printing 2nd Instalment of "Official List"	1,884 4 9
50	Proportion of Administration Expenses	50 0 0
3,284	Balance carried forward to Balance Sheet	1,691 1 4
£3,334		£3,625 6 1

the year ended 31st December, 1966

1965 £	£	INCOME	£ s. d.	£ s. d.
		Sales of Publications—		
	762	International Code	658 10 7	
	651	Opinions and Declarations	168 5 9	
	5,041	Bulletin of Zoological Nomenclature	5,413 13 1	
	2	Copenhagen Decisions on Zoological Nomenclature ..	3 10 3	
6,456				
14		Donations		6,243 19 8
533		Interest Received on Investments (gross)		14 18 10
200		Interest on Bank Deposit		618 4 2
—		Grant from U.N.E.S.C.O. per International Union of Biological Sciences		246 8 7
				356 1 2
£7,203				£7,479 12 5
3,439		Balance brought forward from 1965		4,098 10 6
659		Balance brought down		1,115 16 1
£4,098				£5,214 6 7

Suspense Account

31st December, 1966

1965 £		£ s. d.	£ s. d.
3,211	Balance brought forward from 1965		3,283 16 8
123	Sales of Publications		341 9 5
£3,334			£3,625 6 1

COMMENT ON THE TYPE-SPECIES OF THE CONODONT GENUS *POLYGNATHUS*. (Z.N.(S.) 1796)

(see volume 24, pages 239–243)

By Curtis W. Sabrosky (*U.S. Department of Agriculture, Washington, D.C., U.S.A.*)

Klapper and his colleagues raise two sound objections (par. 10) to the alternative of designating a neotype for *Polygnathus dubius* Hinde, the type-species of the conodont genus *Polygnathus*. Clearly the same objections, and particularly their first, apply forcefully in principle to any other action.

The lectotype of *P. dubius* is still in existence, and it is entire (as conodonts go!) but partly embedded in a matrix so that only one aspect can be seen. In many groups, the actual existence of an entire (lecto) holotype would be welcomed. The obvious step is to treat it in such manner that the other aspects can be studied, and the zoological assignment determined. Then and then only should the need of coming to the Commission be determined.

I am opposed to dealing with the application until the zoology has been properly explored.

REPLY TO COMMENTS ON THE PROPOSED SUPPRESSION OF *CORNUFER UNICOLOR* TSCHUDI, 1838 (AMPHIBIA). Z.N.(S.) 1749

(see volume 23, pages 167–168, volume 24, page 192)

By Richard G. Zweifel (*The American Museum of Natural History, New York, U.S.A.*)

I have shown that the type-species of the genus *Cornufer*, a name commonly applied to ranid frogs of the Pacific islands, is a species of leptodactylid frog of the West Indies (Zweifel, *Copeia* **1967** : 117–121). In order to preserve the well-established name *Eleutherodactylus*, which is a junior synonym of *Cornufer*, I requested that *Cornufer* be suppressed by the plenary powers. Darlington *et al.* (*Bull. zool. Nomencl.* **24** : 192) agree that *Eleutherodactylus* should be conserved, but wish to conserve *Cornufer* also because it "is celebrated in the biogeographical literature". They propose that the Commission do this by suppressing all previous type designations for the genus *Cornufer* and designate a species commonly referred to *Cornufer* in the past (*vitiensis* Girard) as the type of the genus.

The transfer of a generic name from the species and family with which it originally was associated to another species and family is a major exception to the rules of nomenclature, and I am not convinced that Darlington *et al.* put forth a strong enough case to justify this action in the face of the alternative use of the name *Platymantis*. Retention of *Cornufer* would be defensible if the genus were of great importance in the literature or if there was the likelihood of serious confusion among workers using the specialized segment of the literature in which *Cornufer* assumes some importance; there is no evidence that either of these conditions obtains.

Darlington *et al.* correctly observe that every writer who has dealt with the biogeography of the Fijian frogs has used the name *Cornufer*, but it is not evident from their brief discussion that all of the writers they cite as examples used both *Cornufer* and *Platymantis* as valid genera for Fijian frogs. Therefore, any worker using these references need not be confused by the extention of *Platymantis* to include both Fijian species, any more than by the use of *Cornufer* for both. The question is whether a name's being "celebrated in the biogeographical literature" warrants suspension of the rules of nomenclature. Indeed, one could argue that the name *Platymantis*, which shares prominence with *Cornufer* in the papers cited, is equally "celebrated".

OPINION 835

MELANOPLUS STÅL, 1873, *ACRYDIUM FEMURRUBRUM* DE GEER, 1773, AND *GRYLLUS SANGUINIPES* FABRICIUS, 1798 (INSECTA, ORTHOPTERA): ADDED TO THE OFFICIAL LISTS

RULING.—(1) The generic name *Melanoplus* Stål, 1873 (gender: masculine), type-species by designation by Scudder, 1897, *Acrydium femurrubrum* de Geer, 1773, is hereby placed on the Official List of Generic Names in Zoology with the Name Number 1775.

(2) The following specific names are hereby placed on the Official List of Specific Names in Zoology with the Name Numbers specified:

(a) *femurrubrum* de Geer, 1773, as published in the binomen *Acrydium femurrubrum* (type-species of *Melanoplus* Stål, 1873) (Name No. 2220);

(b) *sanguinipes* Fabricius, 1798, as published in the binomen *Gryllus sanguinipes* (Name No. 2221).

HISTORY OF THE CASE (Z.N.(S.) 1695)

The present case was submitted to the office of the Commission by Drs. D. K. McE. Kevan and V. R. Vickery in February 1965. The application was sent to the printer on 22 February 1965 and was published on 18 May 1965 in *Bull. zool. Nomencl.* **22** : 105–107. The proposals were supported by Dr. K. H. L. Key and Dr. R. L. Edwards (*Bull. zool. Nomencl.* **23** : 76). In his comment Dr. Key drew attention to a misunderstanding by the authors concerning the application of Article 23b of the Code.

DECISION OF THE COMMISSION

On 20 July 1967 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (67)28 either for or against the proposal set out in *Bull. zool. Nomencl.* **22** : 106. At the close of the prescribed voting period on 20 October 1967 the state of the voting was as follows:

Affirmative votes—twenty-one (21), received in the following order: China, Holthuis, Vokes, Sabrosky, Lemche, Evans, Obruchev, Boschma, Mayr, Brinck, Simpson, Munroe, Tortonese, do Amaral, Uchida, Jaczewski, Mertens, Kraus, Alvarado, Ride, Forest.

Negative votes—one (1): Binder.

Voting Papers not returned—one (1): Hubbs.

Professor Bonnet returned a late affirmative vote.

The following comments were made by Commissioners in returning their votes:

Prof. E. Mayr (18.viii.67): " It seems to me that Art. 23b does not strictly apply to this case since the junior synonym (*bilituratus*) was used for the migratory grasshopper only for the four years 1958–1961, and not for a fifty-year period."

Prof. P. Brinck (18.viii.67): " This is a very attractive solution of the problem."

Dr. W. D. L. Ride (19.x.67): " The Commission is being asked to apply Art. 23b, but its hand has been forced by those who have chosen to disregard Art. 23b (ii). This case serves to emphasize the importance of urgent action (both by ' discoverers ' and by the Commission) in respect of cases involving this Article. Names in suspension under Article 23b (ii) can only result in a state of instability in nomenclature until their future is decided. Moreover, any published use of any name for such a taxon during the period of suspension of its oldest name must influence the subsequent decision by the Commission which must take into account universality and usage."

Original References

The following are the original references for names placed on Official Lists by the Ruling given in the present Opinion:

femurrubrum, *Acrydium*, de Geer, 1773, *Mém. Hist. Ins.* **3** : 498, pl. 42, fig. 5

Melanoplus Stål, 1873, *Recens. Orth.* **1** : 79

sanguinipes, *Gryllus*, Fabricius, 1798, *Suppl. Ent. syst.*: 195.

The following is the original reference for the designation of a type-species for a genus concerned in the present Ruling:

For *Melanoplus* Stål, 1873: Scudder, 1897, *Bull. U.S. nat. Mus.* **20** : 122.

CERTIFICATE

I certify that the votes cast on Voting Paper (67)28 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 835.

W. E. CHINA
Acting Secretary
International Commission on Zoological Nomenclature
London
30 *October* 1967

OPINION 836

LEUCTRA STEPHENS, 1835 (INSECTA, PLECOPTERA): DESIGNATION OF A TYPE-SPECIES UNDER THE PLENARY POWERS

RULING.—(1) Under the plenary powers all designations of type-species for the nominal genus *Leuctra* Stephens, 1835, made prior to the present Ruling are hereby set aside, and the nominal species *Phryganea fusca* Linnaeus, 1758, is hereby designated to be the type-species of that genus.

(2) The generic name *Leuctra* Stephens, 1835 (gender: feminine), type-species, by designation under the plenary powers in (1) above, *Phryganea fusca* Linnaeus, 1758, is hereby placed on the Official List of Generic Names in Zoology with the Name Number 1776.

(3) The specific name *fusca* Linnaeus, 1758, as published in the binomen *Phryganea fusca* (type-species of *Leuctra* Stephens, 1835) is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2222.

HISTORY OF THE CASE (Z.N.(S.) 1671)

The present case was submitted to the office of the Commission by Prof. P. Brinck and Dr. J. Illies in November 1964. The application was sent to the printer on 22 February 1965 and was published on 18 May 1965 in *Bull. zool. Nomencl.* **22** : 108–109. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184) and to seven entomological serials. The application was supported by Mr. D. E. Kimmins.

DECISION OF THE COMMISSION

On 20 July 1967 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (67)29 either for or against the proposal set out in *Bull. zool. Nomencl.* **22** : 209. At the close of the prescribed voting period on 20 October 1967 the state of the voting was as follows:

Affirmative votes—twenty-one (21), received in the following order: China, Holthuis, Vokes, Sabrosky, Lemche, Evans, Obruchev, Jaczewski, Boschma, Mayr, Brinck, Munroe, Tortonese, do Amaral, Uchida, Mertens, Kraus, Binder, Alvarado, Ride, Forest.

Negative votes—one (1): Simpson.

Voting Papers not returned—one (1): Hubbs.

Commissioner Bonnet returned a late affirmative vote.

The following comments were made by Commissioners in returning their votes:

Dr. C. W. Sabrosky (2.viii.67): " I vote for this because it is too late to make a counter suggestion. Inasmuch as *Leuctra fusciventris* Stephens was one of the originally included species, I should have preferred to designate that nominal species as type-species. If granted, this proposal would apparently leave *L.*

geniculata without a generic name, but I presume this will be taken care of elsewhere. I see no need for a neotype. Brinck (1949) was able to settle the identity of *P. fusca* without it."

Prof. G. G. Simpson (25.viii.67): " That two genera have been united under the single name *Leuctra* is a zoological, not nomenclatural, conclusion already reached in 1841. This proposal asks that the name be restricted to what is plainly (and has been since 1838) the wrong genus. It also seems to leave *Leuctra*, correctly and strictly speaking, without a name."

Original References

The following are the original references for names placed on Official Lists by the Ruling given in the present Opinion:

fusca, Phryganea, Linnaeus, 1758, *Syst. Nat.* (ed. 10) **1** : 549

Leuctra Stephens, 1835, *Ill. Brit. Ent.* **6** : 144.

CERTIFICATE

I certify that the votes cast on Voting Paper (67)29 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 836.

W. E. CHINA
Acting Secretary
International Commission on Zoological Nomenclature
London
31 *October* 1967

COMMENT ON THE PROPOSED SUPPRESSION OF *CHARAXES JOCASTE* BUTLER (LEPIDOPTERA). (Z.N.(S.) 1806)

(see volume 24, pages 255–256)

By Curtis W. Sabrosky (*U.S. Department of Agriculture, Washington, D.C., U.S.A.*)

Proposed use of the plenary powers in this case evades the real question, and the matter of principle involved, as to whether *Charaxes iocaste* Butler, 1865 (not *jocaste* as stated in the title of the application, in the proposals on p. 256, and elsewhere in discussion) is or is not an available name under the circumstances of the 1865 publication. I believe that this point should be faced squarely. If the name be judged unavailable, then use of the plenary powers would be unnecessary; if it be judged available, then the Plenary Powers may be invoked.

If one were to regard a group (sectional) description as making available any included nude species-group name, why then would not the mere combination with a previously described generic name likewise furnish, by association-indication, a similar group (generic) description? Rules stretched too far lose definition and precision. I prefer to regard *C. iocaste* Butler, 1865, as unavailable, it being without description or diagnosis of its own.

OPINION 837

NUPEDIA KARL, 1930 (INSECTA, DIPTERA): DESIGNATION OF A TYPE-SPECIES UNDER THE PLENARY POWERS

RULING.—(1) Under the plenary powers all designations of type-species for the nominal genus *Nupedia* Karl, 1930, made prior to the present Ruling are hereby set aside, and the nominal species *Anthomyia infirma* Meigen, 1826, is hereby designated to be the type-species of that genus.

(2) The generic name *Nupedia* Karl, 1930 (gender : feminine), type-species, by designation under the plenary powers in (1) above, *Anthomyia infirma* Meigen, 1826, is hereby placed on the Official List of Generic Names in Zoology with the Name Number 1777.

(3) The specific name *infirma* Meigen, 1826, as published in the binomen *Anthomyia infirma* (type-species of *Nupedia* Karl, 1930) is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2223.

HISTORY OF THE CASE (Z.N.(S.) 1691)

The present case was submitted to the office of the Commission by Mr. D. M. Ackland in January 1965. Mr. Ackland's application was sent to the printer on 22 February 1965 and was published on 18 May 1965 in *Bull. zool. Nomencl.* **22** : 110–111. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184) and to seven entomological serials. The proposals were supported by Mr. J. E. Collins.

DECISION OF THE COMMISSION

On 20 July 1967 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (67)30 either for or against the proposals set out in *Bull. zool. Nomencl.* **22** : 111. At the close of the prescribed voting period on 20 October 1967 the state of the voting was as follows:

Affirmative votes—twenty-two (22), received in the following order: China, Holthuis, Vokes, Sabrosky, Lemche, Evans, Obruchev, Boschma, Mayr, Brinck, Simpson, Munroe, Tortonese, do Amaral, Uchida, Jaczewski, Mertens, Kraus, Binder, Alvarado, Ride, Forest.

Negative votes—none (0).

Voting Papers not returned—one (1): Hubbs.

Prof. Bonnet returned a late affirmative vote.

Original References

The following are the original references for names placed on Official Lists by the Ruling given in the present Opinion:

infirma, Anthomyia, Meigen, 1826, *Syst. Beschr. zweifl. Ins.* **5** : 176.

Nupedia Karl, 1930, *Zool. Anz.* **86** : 174

CERTIFICATE

I certify that the votes cast on Voting Paper (67)30 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 837.

W. E. CHINA
Acting Secretary
International Commission on Zoological Nomenclature
London
31 *October* 1967

OPINION 838

HETEROTRYPA NICHOLSON, 1879, AND *PERONOPORA* NICHOLSON, 1881 (BRYOZOA): DESIGNATION OF TYPE-SPECIES UNDER THE PLENARY POWERS

RULING.—(1) Under the plenary powers:

(a) all designations of type-species for the nominal genus *Heterotrypa* Nicholson, 1879, made prior to the present Ruling are hereby set aside, and the nominal species *Monticulipora frondosa* d'Orbigny, 1850, is hereby designated to be the type of that genus;

(b) all designations of type-species for the nominal genus *Peronopora* Nicholson, 1881, made prior to the present Ruling are hereby set aside, and the nominal species *Chaetetes decipiens* Rominger, 1866, is hereby designated to be the type of that genus.

(2) The following generic names are hereby placed on the Official List of Generic Names in Zoology with the Name Numbers specified:

(a) *Heterotrypa* Nicholson, 1879 (gender: feminine), type-species, by designation under the plenary powers in (1) above, *Monticulipora frondosa* d'Orbigny, 1850 (Name No. 1778);

(b) *Peronopora* Nicholson, 1881 (gender: feminine), type-species, by designation under the plenary powers in (1) above, *Chaetetes decipiens* Rominger, 1866 (Name No. 1779).

(3) The following specific names are hereby placed on the Official List of Specific Names in Zoology with the Name Numbers specified:

(a) *frondosa* d'Orbigny, 1850, as published in the binomen *Monticulipora frondosa* (type-species of *Heterotrypa* Nicholson, 1879) (Name No. 2224);

(b) *decipiens* Rominger, 1866, as published in the binomen *Chaetetes decipiens* (type-species of *Peronopora* Nicholson, 1881) (Name No. 2225).

HISTORY OF THE CASE (Z.N.(S.) 1693)

The present case was submitted to the office of the Commission by Drs. John Utgaard and Richard S. Boardman in January 1965. The application was sent to the printer on 22 February 1965 and was published on 18 May 1965 in *Bull. zool. Nomencl.* **22** : 112–118. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184). No comment was received.

DECISION OF THE COMMISSION

On 20 July 1967 the Members of the Commission were invited to vote on Voting Paper (67)31 either for or against the proposals set out in *Bull. zool. Nomencl.* **22** : 117. At the close of the prescribed voting period on 20 October 1967 the state of the voting was as follows:

Affirmative votes—twenty-two (22), received in the following order: China, Holthuis, Vokes, Sabrosky, Lemche, Evans, Obruchev, Jaczewski, Boschma, Mayr, Brinck, Simpson, Munroe, Tortonese, do Amaral, Uchida, Mertens, Kraus, Binder, Alvarado, Ride, Forest.

Negative votes—none (0).

Voting Papers not returned—one (1): Hubbs.

Prof. Bonnet returned a late affirmative vote.

Original References

The following are the original references for names placed on Official Lists by the Ruling given in the present Opinion:

decipiens, *Chaetetes*, Rominger, 1866, *Proc. Acad. nat. Sci. Philad.* **1866** : 116, 117.

frondosa, *Monticulipora*, d'Orbigny, 1850, *Prodr. Paléont.* **1** : 25.

Heterotrypa Nicholson, 1879, *On the Structure and Affinities of the Tabulate Corals*: 291, 293.

Peronopora Nicholson, 1881, *On the Structure and Affinities of the Genus Monticulipora*: 100, 102.

CERTIFICATE

I certify that the votes cast on Voting Paper (67)31 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 838.

W. E. CHINA
Acting Secretary
International Commission on Zoological Nomenclature
London
31 *October* 1967

OPINION 839

ANTHANASSA SCUDDER, 1875 (INSECTA, LEPIDOPTERA): DESIGNATION OF A TYPE-SPECIES UNDER THE PLENARY POWERS

RULING.—(1) Under the plenary powers all designations of type-species for the nominal genus *Anthanassa* Scudder, 1875, made prior to the present Ruling are hereby set aside, and the nominal species *Melitaea texana* Edwards, 1863, is hereby designated to be the type of that genus.

(2) The generic name *Anthanassa* Scudder, 1875 (gender: feminine), type-species, by designation under the plenary powers in (1) above, *Melitaea texana* Edwards, 1863, is hereby placed on the Official List of Generic Names in Zoology with the Name Number 1780.

(3) The specific name *texana* Edwards, 1863, as published in the binomen *Melitaea texana* (type-species of *Anthanassa* Scudder, 1875) is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2226.

HISTORY OF THE CASE (Z.N.(S.) 1697)

The present case was submitted to the office of the Commission by Mr. F. Martin Brown in March 1965. Mr. Brown's application was sent to the printer on 20 May 1965 and was published on 13 August 1965 in *Bull. zool. Nomencl.* **22** : 192–194. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184) and to eight entomological serials. No comment was received.

DECISION OF THE COMMISSION

On 20 July 1967 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (67)32 either for or against the proposal set out in *Bull. zool. Nomencl.* **22** : 193. At the close of the prescribed voting period on 20 October 1967 the state of the voting was as follows:

Affirmative votes—twenty-one (21), received in the following order: China, Holthuis, Vokes, Sabrosky, Lemche, Evans, Obruchev, Boschma, Mayr, Brinck, Simpson, Tortonese, do Amaral, Uchida, Jaczewski, Mertens, Kraus, Binder, Alvarado, Ride, Forest.

Negative votes—one (1): Munroe.

Voting Papers not returned—one (1): Hubbs.

Commissioner Bonnet returned a late affirmative vote.

In returning his negative vote, Dr. E. G. Munroe made the following comment: " I believe that as Forbes has already followed one of the legitimate solutions of this dilemma, it will tend to increase confusion rather than to reduce it if the plenary powers are used to reverse his action."

ORIGINAL REFERENCES

The following are the original references for names placed on Official Lists by the Ruling given in the present Opinion:

Anthanassa Scudder, 1875, *Bull. Buffalo Soc. nat. Hist.* **2** : 268

texana, Melitaea, Edwards, 1863, *Proc. ent. Soc. Philad.* **2** : 81

CERTIFICATE

I certify that the votes cast on Voting Paper (67)32 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 839.

W. E. CHINA
Acting Secretary
International Commission on Zoological Nomenclature
London
1 *November* 1967

OPINION 840

AMBLEMA RAFINESQUE, 1820 (LAMELLIBRANCHIATA): VALIDATED UNDER THE PLENARY POWERS

RULING.—(1) Under the plenary powers the generic name *Amblema* Rafinesque, 1819, is hereby suppressed for the purposes of both the Law of Priority and the Law of Homonymy.

(2) The generic name *Amblema* Rafinesque, 1820 (gender: feminine), type-species, by designation by Frierson, 1914, *Amblema costata* Rafinesque, 1820, is hereby placed on the Official List of Generic Names in Zoology with the Name Number 1781.

(3) The specific name *plicata* Say, 1817, as published in the binomen *Unio plicata*, is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2227.

(4) The generic name *Amblema* Rafinesque, 1819, as suppressed under the plenary powers in (1) above, is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology with the Name Number 1915.

HISTORY OF THE CASE (Z.N.(S.) 1699)

The present case was submitted to the office of the Commission by Drs. Arthur H. Clarke, Jr., and William J. Clench in May 1965. The application was sent to the printer on 20 May 1965 and was published on 13 August 1965 in *Bull. zool. Nomencl.* **22** : 196–197. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184) and to two specialist serials.

The application was supported by Dr. F. R. Woodward (*Bull. zool. Nomencl.* **23** : 7), Dr. H. D. Murray, Mr. H. D. Athearn and Prof. J. B. Burch. Drs. Clarke and Clench revised their proposals, requesting addition to the Official List of *Unio plicata* Say, instead of *Amblema costata* Rafinesque in a note published in *Bull. zool. Nomencl.* **22** : 341.

DECISION OF THE COMMISSION

On 20 July 1967 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (67)34 either for or against the proposals set out in *Bull. zool. Nomencl.* **22** : 197 and revised in *Bull. zool. Nomencl.* **22** : 341. At the close of the prescribed voting period on 20 October 1967 the state of the voting was as follows:

Affirmative votes—twenty-one (21), received in the following order: China, Holthuis, Vokes, Sabrosky, Lemche, Evans, Obruchev, Boschma, Mayr, Brinck, Munroe, Tortonese, do Amaral, Uchida, Jaczewski, Mertens, Kraus, Binder, Alvarado, Ride, Forest.

Negative votes—one (1); Simpson.

Voting Papers not returned—one (1): Hubbs.

Commissioner Bonnet returned a late affirmative vote.

In returning his negative vote, Prof. G. G. Simpson made the following comment: " I would have voted for the original proposal, but the revision is unjustified and inadvisable. On the authors' own showing, it seeks to suppress a name ' universally ' used, and solely on grounds of cryptic priority, which the Commission could and should negate in favour of stability."

Original References

The following are the original references for names placed on Official Lists and Index by the Ruling given in the present Opinion:

Amblema Rafinesque, 1819, *J. Phys. Chim. Hist. nat.* (Paris) **88** : 427

Amblema Rafinesque, 1820, *Ann. gén. Sci. phys.*, Bruxelles, **5** : 314

plicata, *Unio*, Say, 1817, *Nicholson's Ency.* (Amer. ed. 1), art. Conchology, pl. 3, fig. 2.

The following is the original reference for the designation of a type-species for a genus concerned in the present Ruling:

For *Amblema* Rafinesque, 1820: Frierson, 1914, *Nautilus* **28** : 7

CERTIFICATE

I certify that the votes cast on Voting Paper (67)34 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 840.

W. E. CHINA
Acting Secretary
International Commission on Zoological Nomenclature
London
2 *November* 1967

OPINION 841

VOLUTA PERTUSA LINNAEUS, 1758, *VOLUTA MORIO* LINNAEUS, 1767, *VOLUTA RUFFINA* LINNAEUS, 1767, AND *BULLA CONOIDEA* LINNAEUS, 1767: SUPPRESSED UNDER THE PLENARY POWERS

RULING.—(1) Under the plenary powers the following specific names are hereby suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy:

(a) *pertusa* Linnaeus, 1758, as published in the binomen *Voluta pertusa*;

(b) *morio* Linnaeus, 1767, as published in the binomen *Voluta morio*;

(c) *ruffina* Linnaeus, 1767, as published in the binomen *Voluta ruffina*;

(d) *conoidea* Linnaeus, 1767, as published in the binomen *Bulla conoidea*.

(2) The following specific names are hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology, as suppressed under the plenary powers in (1) above, with the Name Numbers specified:

(a) *pertusa* Linnaeus, 1758, as published in the binomen *Voluta pertusa* (Name No. 885);

(b) *morio* Linnaeus, 1767, as published in the binomen *Voluta morio* (Name No. 886);

(c) *ruffina* Linnaeus, 1767, as published in the binomen *Voluta ruffina* (Name No. 887);

(d) *conoidea* Linnaeus, 1767, as published in the binomen *Bulla conoidea* (Name No. 888).

HISTORY OF THE CASE (Z.N.(S.) 1700)

The present case was submitted to the office of the Commission by Mr. Walter O. Cernohorsky in May 1965. Mr. Cernohorsky's application was sent to the printer on 20 May 1965 and was published on 13 August 1965 in *Bull. zool. Nomencl.* **22** : 198–203. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull zool. Nomencl.* **21** : 184) and to two specialist serials. The proposals were supported by Dr. Jean M. Cate.

DECISION OF THE COMMISSION

On 20 July 1967 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (67)35 either for or against the proposals set out in *Bull. zool. Nomencl.* **22** : 202–203. At the close of the prescribed voting period on 20 October 1967 the state of the voting was as follows:

Affirmative votes—eighteen (18), received in the following order: Holthuis, Vokes, Lemche, Evans, Obruchev, Boschma, Mayr, Brinck, Simpson, Tortonese, Munroe, do Amaral, Uchida, Jaczewski, Mertens, Binder, Alvarado, Forest.

Negative votes—four (4): China, Sabrosky, Kraus, Ride.

Voting Papers not returned—one (1): Hubbs.

Commissioner Bonnet returned a late affirmative vote.

The following comments were made by Commissioners in returning their votes:

Dr. C. W. Sabrosky (2.viii.67): " I am opposed to Commission action on cases of *nomina dubia*. Should not these cases be delayed until the Commission can rule on my application regarding *nomina dubia* in general? "

Dr. Henning Lemche (3.viii.67): " I favour the suppression because of the many serious but unsuccessful attempts that have been made to identify these species."

Prof. P. Brinck (18.viii.67): " I vote for the proposal with some doubt, as the applicant has not consulted nor refers to the Upsala collection of Linnaean material. It is rich in molluscs and has been listed by Dr. Alec Holm. Microfilms of the material have been distributed to various institutions. A copy is with the Linnean Society in London. The Upsala collection contains i.a. the material from the Museum Lud. Ulricae."

Prof. G. G. Simpson (25.viii.67): " This action is doubtless within the powers of the Commission. If one wanted to be legalistic, however, one could object to the proposal of suppression on grounds that these are *nomina dubia*. There is no rule or ruling that *nomina dubia* are to be suppressed *ipso facto*, and the implication that this is so is virtually a clandestine amendment of the Code (see also *Bull. zool. Nomencl.* **22** : 273)."

Dr. Otto Kraus (16.x.67): " As the applicant explains there seems to be no doubt that all four names should be regarded as *nomina dubia*. There is not even one case in which they threaten stability at present, so I do not understand the necessity of action by the Commission."

Dr. W. D. L. Ride (19.x.67): " In my opinion, the plenary powers should not be used to suppress a *nomen dubium* merely because it cannot be fixed to a taxon because there is no type specimen. Neotype selection provides for this situation within the normal provisions of the Code and it should be used unless all possible action of this nature will result in confusion. The author has not demonstrated that confusion will result in these cases although it does appear implicit in two of them. If he can demonstrate such confusion, he should reapply. Certainly, the case of *V. morio* can be settled without confusion by the selection of an undoubted specimen of *V. caffra*; and that of *B. conoidea* by a specimen of *V. dactylus* (with appropriate action by a first reviser to settle priority).

Original References

The following are the original references for names placed on the Official Index by the Ruling given in the present Opinion:

conoidea, Bulla, Linnaeus, 1767, *Syst. Nat.* (ed. 12) **1** : 1185

morio, Voluta, Linnaeus, 1767, *Syst. Nat.* (ed. 12) **1** : 1193

pertusa, Voluta, Linnaeus, 1758, *Syst. Nat.* (ed. 10) **1** : 732

ruffina, Voluta, Linnaeus, 1767, *Syst. Nat.* (ed. 12) **1** : 1192

CERTIFICATE

I certify that the votes cast on Voting Paper (67)35 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion.

W. E. CHINA
Acting Secretary
International Commission on Zoological Nomenclature
London
3 *November* 1967

CELLARIA ELLIS & SOLANDER, 1786 (POLYZOA): ITS TYPE, AND THE NAMES OF THREE SPECIES. Z.N.(S.) 1814

By J. S. Ryland (*Department of Zoology, University College of Swansea, Wales*)

The genus *Cellaria* was introduced by Ellis & Solander (1786 : 18), but a study of the history of the species concerned must start with Ellis' "*Natural History of the Corallines*". Ellis (1755 : 46), under the heading Articulated Corallines, No. 1, actually described two species clearly recognizable as belonging to the genus *Cellaria* in its currently accepted sense:

(a) "Bugle Coralline". First synonym: "*Corallina fistulosa fragilis crassior* J.B." [Bauhin]. Hereafter referred to as the Larger Bugle Coralline.

(b) "A smaller species of the same, which differs only in the diameter of the branches". First synonym: "*Corallina fistulosa fragilis subtilior.* J.B." [Bauhin]. Hereafter called the Smaller Bugle Coralline.

The Bugle Coralline is illustrated by five figures in Pl. XXIII, viz. *a* and A–D. Fig. *a* shows "the natural size of the larger Bugle Coralline", A–C, parts of it magnified. D is not mentioned in the text, but is obviously the same form. It seems clear, therefore, that the plate illustrates the Larger Bugle Coralline only, and this is a conclusion of importance.

2. In the 10th edition of *Systema Naturae*, Linnaeus (1758 : 804) introduced *Eschara fistulosa*, based on references to Ellis, Bauhin, Ray, Plukenet and Barrelierus, in that order. Harmer (1923 : 301–3) has examined the works cited in this synonymy and found that, with the exception of Ellis' Bugle Coralline, the species concerned cannot be precisely identified, being, moreover, not always referable to the genus *Cellaria* or even to the phylum Polyzoa. He concluded that the Linnaean species must be considered as having been founded on the work of Ellis. This, in fact, accords well with what is known of the relationship between Ellis and Linnaeus, for the latter consistently based his species of Zoophyte upon the descriptions and admirable illustrations in Ellis' book (Harmer, 1930).

The citation of the first synonym reads: "*Ellis corall.* 46, n.1, t. 23, f. A"; and the second "*Bauh. hist.* 3, p. 811. Corallina fistulosa fragilis crassior". These two entries, especially the figure reference to Ellis, and the "crassior" from Bauhin place it firmly beyond doubt that *Eschara fistulosa* is the Larger Bugle Coralline of Ellis, which was the conclusion reached by Harmer (1923).

3. In the *Elenchus Zoophytorum*, Pallas (1766 : 61) introduced *Cellularia salicornia*, which he divided into two sections:

(α) [hereafter referred to as *C. salicornia* (α)] for the Larger Bugle Coralline of Ellis, citing Pl. 23 and using the description "crassior".

(β) [hereafter referred to as *C. salicornia* (β)] for the Smaller Bugle Coralline, as evidenced by "subtilior" and "tenuior" in the synonymy.

Pallas, however, made the first of the series of blunders which have characterized the history of the genus *Cellaria*, for he placed *Eschara fistulosa* L. in the synonymy of *C. salicornia* (β), instead of (α) where it properly belonged. It will, however, be observed that, ignoring for the moment the actions of later

authors, under the provisions of Art. 17 (2) of the International Rules, *C. salicornia* Pallas is available as the valid name of a species. Indeed, considering Linnaeus (1758) and Pallas (1766) alone, the Larger Bugle Coralline should be called *C. fistulosa* L., and the Smaller *C. salicornia* Pallas.

4. In the 12th edition of *Systema Naturae*, Linnaeus (1767 : 1302) classified his species as *Tubularia fistulosa*.

5. The genus *Cellaria* was introduced by Ellis and Solander (1786 : 18) for 18 species, most of which had been included by Pallas in his genus *Cellularia*. Thus *Cellaria* may well have been a deliberate alteration in spelling of *Cellularia*, but it has been subsequently treated as an independent introduction.

Species 13 listed was *Cellaria farciminoides*, for which two synonyms were quoted:

Bugle Coralline. Ellis Corallin, pag. 46, tab. 23

Tubularia fistulosa. Linn. Syst. Nat. Ed. 12. pag. 1302.

Clearly then, *C. farciminoides* is again a name for the Larger Bugle Coralline of Ellis, and is synonymous with *C. salicornia* (α) of Pallas, although the *Elenchus* was not cited.

The other species included have been referred to various modern genera.

6. Lamarck (1801 : 382) considerably restricted the size and scope of *Cellaria*, limiting it to something near to its modern meaning. He listed two species only:

(1) *C. salicornia*, with synonyms *C. farciminoides* Ell. & Sol., and *Tubularia fistulosa* L.

(2) *C. cirrata* Ell. & Sol., later designated as type-species of *Menipea*, see Harmer (1923).

7. Lamouroux (1816 : 127) both defined the genus and designated a type-species by observing: " J'ai conservé le nom de Cellaire au groupe dont les Polypiers avaient pour type le *Cellaria Salicornia* ". Moreover, Lamouroux recognized the distinction between *C. salicornia* (α) and *C. salicornia* (β), and it was specifically the former to which he restricted Pallas' name. So far as nomination of type-species was concerned, Lamouroux was perfectly consistent. The only *Cellaria* in his sense listed by Ellis & Solander (1786 : 18, 26) was *C. farciminoides*, but Lamouroux' designation is valid in accordance with Art. 69a (iv) of the International Rules, since *C. farciminoides* was listed as a synonym. But, since both *C. farciminoides* and *C. salicornia* (α) are junior objective synonyms of *C. fistulosa* (all three being founded on Pl. 23 in Ellis, 1755), the latter is type-species *ipso facto*.

8. Lamouroux' restriction of *Cellaria* and designation of type-species would have been admirable had he employed either of the names *fistulosa* or *farciminoides*; instead, he used *salicornia* restricted to Pallas' division (α). This had the effect of equating *C. salicornia* with *C. fistulosa* and *C. farciminoides*, all as names for the Larger Bugle Coralline. This is exactly what should not have happened (final lines of 3. above). As corollary he then introduced *C. salicornioides* for *C. salicornia* (β) emphasizing that it was a distinct species, and this name will be further considered in 13–15 below.

9. Fleming in *British Animals* (1828 : 534) described one species, using the Linnaean name *fistulosa* placed in a new genus *Farcimia*. It is, however,

impossible to be sure which of the two he was describing, although he cited Ellis (1755, Pl. 23). He stated that the diameter of the branches was " not exceeding the twentieth of an inch ". In the Smaller Bugle Coralline the maximum diameter is about 0·6 mm. (1/40th in.), and in the Larger Bugle Coralline about 1·0 mm. (1/25th in.). His definition thus covers both, but appears to indicate that he had material of the larger species, though this may well have been mixed with specimens of the Smaller Bugle Coralline.

Johnston, in the 1st edition of *British Zoophytes* (1838 : 295), likewise described one species, but called it *Farcimia salicornia*. The illustrations (Pl. 37, fig. 6–7) are so indifferent—greatly inferior to those of Ellis (1755)—that it is impossible to be sure which species was intended. Nevertheless, it was evidently taken as the smaller species by Hassall (1840), who introduced *Farcimia sinuosa*, expressly stating that it was larger than *F. salicornia*.

In the more important 2nd edition of *British Zoophytes*, Johnston (1847 : 355) listed two species, this time placed in the genus *Salicornaria* Cuvier. The first, now called *S. farciminoides*, corresponds to the Smaller Bugle Coralline, whilst the second, corresponding to the Larger Bugle Coralline, was *S. sinuosa*. Busk (1852) likewise employed *Salicornaria farciminoides*, treating *S. sinuosa* as a variety of it.

A definite pattern had now been established. The Smaller Bugle Coralline is the commoner species in British waters, and this was taken as being the only one described by Fleming (1828) and Johnston (1847). The name applied to it throughout this period was one of three (*fistulosa*, *salicornia* and *farciminoides*), all of which had been given or subsequently restricted to the Larger Bugle Coralline. Hassall (1840) unaware of the transposition which had occurred, redescribed the Larger Bugle Coralline as *F. sinuosa*, and his name was used by Johnston (1847) and Busk (1852) writing soon afterwards.

10. Following d'Orbigny (1851), Smitt (1868 : 362) and Hincks (1880 : 106) utilized the genus *Cellaria*, but reverted to the Linnaean epithet *fistulosa* in recognition of its priority. Both, however, accepted established practice and applied the name to the smaller species. The influence of these latter two authors has been enormous. Smitt's *Critical Catalogue* remained the only comprehensive work on Arctic-Boreal Atlantic Polyzoa until 1962, whilst Hincks' *British Marine Polyzoa* remains to this day the most complete account of cold-temperate European species. Having perpetuated an error which no one prior to Harmer (1923) attempted to correct, it is clearly impossible now to restore, as Harmer suggested, the Linnaean name to the Larger Bugle Coralline of Ellis, for which it was originally proposed.

11. In writing this historical summary, I have drawn freely on the earlier review by Harmer (1923). His conclusions were:

(a) that *Eschara fistulosa* L. was based on the Larger Bugle Coralline of Ellis, and should replace *C. sinuosa* Hassall as the name employed for that species;

(b) that *Cellularia salicornia* (α) Pallas, type-species of *Cellaria* selected by Lamouroux, is an objective synonym of *E. fistulosa*. The latter was then regarded as being the type-species;

(c) that the name *C. salicornia* Pallas should be restricted to the (β) form (noted by Hastings (1947) as invalid, since it ignored Lamouroux' earlier restriction to the (α) form).

To have implemented (a) would, as stated in 10. above, have created enormous confusion, with a well-established name being transferred from one well-known species to another. (b) has been accepted; and so has (c) by some authors (Marcus, 1940 (discussion 1950); Prenant & Bobin, 1966), despite the objection raised by Hastings (1947). The result in their works has been the displacement of the Linnaean name from use for the smaller species in favour of Pallas' name *salicornia*. Other authors (Hastings, 1947; Lagaaij, 1952; Buge, 1957; Marine Biological Association, 1957; Gautier, 1962; Galopim de Carvalho, 1963) have used the citation *C. fistulosa* auctt. (non L.), or its equivalent[1]. Authors in both groups have continued to use Hassall's name, *C. sinuosa*, for the Larger Bugle Coralline.

12. The *status quo* is wholly unacceptable, because either no species at all, or else the wrong one, is being called by the name of the type-species *C. fistulosa*. The situation can only be remedied by decision of the International Commission either:

(a) suppressing altogether the name *Eschara fistulosa* Linn., 1758 (= *Tubularia fistulosa* Linn., 1767); or

(b) transferring the name so that it applies not to the Larger Bugle Coralline, but to the Smaller Bugle Coralline, as in recent literature.

Under (a):

(i) the type-species is not altered, but it must be called by one of its synonyms;

(ii) it is undesirable that the name employed should be the objective synonym and second oldest name, *C. salicornia* Pallas, despite its designation by Lamouroux, because it is now being used by some as the name for the Smaller Bugle Coralline;

(iii) the remaining objective synonym is *C. farciminoides* Ell. & Sol., which undoubtedly has the strongest claim. Its use in the past as the name of the Smaller Bugle Coralline has been unimportant but, on the other hand, it is not the name currently in use for the Larger Bugle Coralline;

(iv) *C. sinuosa* is employed at the present time as the name of the Larger Bugle Coralline. As a subjective synonym, it has, however, no direct claim to become type-species of the genus. Thus, despite the undesirability of changing an established name, in the long term it would probably be better to suppress *C. sinuosa* and restore the older name *C. farciminoides*;

[1]Whichever name is to be used, it must be linked to the type specimen of *C. salicornia* Pallas. There is no lectotype available, and a neotype should be chosen from material of the Smaller Bugle Coralline. Specimen 1854.11.15.249 in the British Museum (Natural History) may have been illustrated by Busk (1852), but is not sufficiently good for designation. No specimen can be located which matches Hincks' (1880) figures. Accordingly, the proposed neotype is the specimen labelled *Salicornaria farciminoides*, collected by Mrs. Gatty in Dublin Bay, registered number 1899.7.1.1572.

(v) whichever of the courses (iii) or (iv) were adopted, *C. salicornia* would be the valid name for the Smaller Bugle Coralline. In view of the doubt thrown by Hastings (1947) on the identity of *C. salicornioides* Lamx. (see 13. to 15. below), this name should not be considered as available for the Smaller Bugle Coralline of Ellis.

Under (b):

(vi) the Smaller Bugle Coralline would be named *C. fistulosa* in accordance with much past usage;

(vii) the name *C. salicornia* Pallas, having become ambiguous, would have to be suppressed;

(viii) the name for the Larger Bugle Coralline would be either *C. farciminoides* or *C. sinuosa* as in (iii) or (iv) above;

(ix) it would have to be decided whether the type-species was *C. fistulosa* in its new sense, thereby involving another species, or whether it remained the Larger Bugle Coralline under the name decided in (viii) above.

The arguments which perhaps weight the balance in favour of the first alternative, 12(a) above, are:

(x) that the type-species then remains unambiguously the Larger Bugle Coralline, especially if the name *farciminoides* be employed;

(xi) *C. salicornia* was introduced by Pallas for two species. Alternative (v) merely decides to which it should apply; (vi), however, removes a name from one species and applies it to another.

13. Further difficulties remain. When designating *Cellularia salicornia* (α) Pallas as type-species of *Cellaria* Ellis & Solander, Lamouroux (1816 : 127) introduced *Cellaria salicornioides* for *Cellularia salicornia* (β). But Lamouroux' specimen, from the Mediterranean, may not have been the Smaller Bugle Coralline of Ellis, but another slender species. Whether or not this originally constituted a valid reason for rejecting *salicornioides* as a synonym of *salicornia* (β), subsequent usage has certainly made it so. The whole problem has been carefully considered by Hastings (1947).

14. A species was figured by Savigny (Audouin, 1826), which Audouin referred to *C. salicornioides* Lamx. D'Orbigny (1851), however, considered that it was not that species, and introduced a new name *C. savignyi*. Later, Busk (1858) described *Nellia johnsoni* from Madeira, soon (1859) transferring it to *Cellaria*. Hincks (1880 : 112) used the combination *Cellaria johnsoni*. Hastings established beyond doubt that *C. johnsoni* is a junior synonym of *C. savignyi*, but was unable to decide whether this in turn is a junior synonym of *C. salicornioides* Lamx.

This uncertainty has led to the unsatisfactory citation of the species as *C. salicornioides* Audouin (? Lamouroux) or the equivalent (Hastings, 1947; Marine Biological Association, 1957; Gautier, 1962; Galopim de Carvalho, 1963; Prenant & Bobin, 1966). That the last three of these works, by authors that do or have worked in France, employ this attribution may be taken to indicate that there is no Lamouroux specimen available, and therefore no solution, other than application to the International Commission.

15. There are then, two possible courses of action:

(a) to regard *Cellaria salicornioides* Lamx. as unrecognizable, and to request its suppression by the International Commission. *C. savignyi* d'Orbigny 1951 would then become unambiguously a valid name; or

(b) to request the International Commission to use the plenary powers to designate a neotype of *C. salicornioides* Lamx., such that it becomes unambiguously the senior synonym of *C. savignyi* d'Orb., and *C. johnsoni* (Busk)[1].

The latter is the preferable course of action, since *C. savignyi* has never been used since its introduction and *C. salicornioides* is the name used for the species by recent authors (cited in 13. above).

16. The principal works involved in the foregoing discussion are cited in the following synonymies of the three species involved:

(a) Bugle Coralline: Ellis, 1755 : 46, Pl. XXIII
Eschara fistulosa Linnaeus, 1758 : 804
Cellularia salicornia (α) Pallas, 1766 : 61
Tubularia fistulosa: Linnaeus, 1767 : 1302
Cellaria farciminoides Ellis & Solander, 1786 : 26
Cellaria salicornia: Lamarck, 1801 : 382
Cellaria salicornia: Lamouroux, 1816 : 126
Farcimia sinuosa Hassall, 1840 : 172, Pl. VI, **1–2**
Salicornaria sinuosa: Johnston, 1847 : 356, Pl. LXVI, **8**
Salicornaria farciminoides, var. α: Busk, 1852: 17, Pl. LXIV, **2**[2]
Cellaria sinuosa, Hassall: Hincks, 1880, 109, Pl. XIII, **5–8**
Cellaria fistulosa (L.): Harmer, 1923 : 303
Cellaria sinuosa (Hassall): Lagaaij, 1952 : 48, Pl. 4, **4–5**
Cellaria sinuosa (Hassal 1840): Buge, 1957 : 195, pl. VIII, **6**
Cellaria sinuosa (Hassall): Marine Biological Association 1957 : 349
Cellaria sinuosa (Hassall) 1840 : Gautier, 1962 : 73
Cellaria sinuosa (Hassal, 1840): Galopim de Carvalho, 1963 : 7, fig. 2
Cellaria sinuosa (Hassall, 1841): Prenant & Bobin, 1966 : 375, fig. 122

(b) Smaller Bugle Coralline: Ellis, 1755 : 46
Cellularia salicornia (β) Pallas, 1766 : 61
[?] *Cellaria salicornioides* Lamouroux, 1816 : 127
Farcimia fistulosa: Fleming, 1828 : 534

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[1]The neotype chosen should probably be one of the two syntypes of *Nellia johnsoni* mentioned by Hastings (1947 : 218). Only one of these slides, British Museum (Natural History) 99.7.1.1588, displays a single piece of *Cellaria*, which, being in good condition, is proposed as neotype. In fact, it is almost certainly not strictly a syntype of *Nellia johnsoni*, although this does not detract from its suitability as neotype. Busk (1859 : 65) wrote: "A figure taken from an imperfect and worn fragment was given in the last part of Zoophytology [original description, Busk 1858 : 125], and the species there referred to the genus *Nellia*. The examination, however, of the beautiful and perfect specimens [topotypes] collected in the present year by Mr. Johnson, necessitates its removal from that genus, and its reference to *Cellaria* Lam." These specimens were illustrated in the 1959 paper, and the proposed neotype is considered to be one of them.

[2]The legend to Pl. LXIV is correct, but in the text (pp. 16–17), Busk erroneously refers his var. α to fig. 3.

Farcimia salicornia: Johnston, 1838 : 295, Pl. XXXVII, **6–7**
Salicornaria farciminoides: Johnston, 1847 : 355, Pl. LXVI, **6–7**
Salicornaria farciminoides: Busk 1852 : 16, Pl. LXIV, 1–3[1]
Cellaria fistulosa (Lin.): Smitt, 1868 : 362, 368, Pl. XX, **18–20**
Cellaria fistulosa, Linnaeus: Hincks, 1880, 106, Pl. XIII, **1–4**
Cellaria salicornia (Pallas): Harmer, 1923 : 303
Cellaria salicornia (Pall.): Marcus, 1940 : 157, fig. 84; 1950 : 11
Cellaria fistulosa auct. (non Linné 1758): Buge, 1957 : 196, Pl. VIII, **5**
Cellaria fistulosa Hincks (? not L.): Marine Biological Association, 1957 : 349
Cellaria fistulosa auct. (non Linné 1758): Gautier, 1962 : 71
Cellaria fistulosa auct.: Galopim de Carvalho, 1963 : 11, fig. 4
Cellaria salicornia (Pallas, 1766): Prenant & Bobin, 1966 : 378, fig. 123

(c) [?] *Cellaria salicornioides* Lamouroux, 1816 : 127
Cellaria salicornioides: Audouin, 1826 : 236, Savigny, Pl. VI, **7**[1–5]
Cellaria savignyi d'Orbigny, 1851 : 28
Nellia Johnsoni Busk, 1858 : 125, Pl. XIX, **2–2a**
Cellaria Johnsoni Busk, 1859 : 65, Pl. XXII, **4–5**
Salicornaria Johnsoni Busk, 1860 : 280, Pl. XXVIII, **4–5**
Cellaria Johnsoni, Busk: Hincks, 1880, 112, Pl. XIII, **9–12**
Cellaria salicornioides Audouin, ? Lamouroux: Hastings, 1947 : 218, Pl. IIA
Cellaria salicornioides Audouin (? Lamouroux): Marine Biological Association, 1957 : 349
Cellaria salicornioides Audouin 1826: Gautier, 1962 : 72
Cellaria salicornioides Audouin 1826, ? Lamouroux 1816: Galopim de Carvalho, 1963, 16, fig. 5
Cellaria salicornioides (? Lamouroux, 1816, Savigny et Audouin, 1826): Prenant & Bobin, 1966 : 382, fig. 124

17. The International Commission on Zoological Nomenclature is requested to use its plenary powers to decide which of the following propositions appear, in its view, best suited to ensure nomenclatorial stability in the genus *Cellaria*:

(1) [*salicornia* and *farciminoides* adopted]

(a) to suppress for the purposes of the Law of Priority but not for the Law of Homonymy the specific name *fistulosa* Linnaeus, 1758, as published in the binomen *Eschara fistulosa*;

(b) to designate a neotype of *Cellularia salicornia* Pallas, 1766, as indicated in 11. above (p. 347, footnote), in accordance with the proposal of Harmer (1923) to restrict the specific name *salicornia* Pallas, 1766, to section (β) of his species;

(c) to place on the Official List of Generic Names in Zoology: *Cellaria* Ellis and Solander, 1786 (gender: feminine), type-species designated by Lamouroux, 1816 (subject to (1)(a) and (b) above), *Cellaria farciminoides* Ellis and Solander, 1786;

[1]The legend to Pl. LXIV is correct, but in the text (pp. 16–17), Busk erroneously refers his var. α to fig. 3.

(2) [*fistulosa* and *farciminoides* adopted]

(a) to designate a neotype of *Eschara fistulosa* Linnaeus, 1758, as indicated in 11. above (p. 347, footnote), in accordance with current usage;

(b) to designate a neotype of *Cellularia salicornia* Pallas, 1766, as indicated in 11. above (p. 347, footnote), in accordance with the proposal of Harmer (1923) to restrict the specific name *salicornia* Pallas, 1766, to section (β) of his species;

(c) to place on the Official List of Generic Names in Zoology: *Cellaria* Ellis and Solander, 1786 (gender: feminine), type-species designated by Lamouroux, 1816 (subject to (2)(a) and (b) above), *Cellaria farciminoides* Ellis and Solander, 1786;

(3) [*salicornia* and *sinuosa* adopted]

(a) to suppress for the purposes of the Law of Priority but not for the Law of Homonymy the specific name *fistulosa* Linnaeus, 1758, as published in the binomen *Eschara fistulosa*;

(b) to designate a neotype of *Cellularia salicornia* Pallas, 1766, as indicated in 11. above (p. 347, footnote), in accordance with the proposal of Harmer (1923) to restrict the specific name *salicornia* Pallas, 1766, to section (β) of his species;

(c) to suppress for the purposes of the Law of Priority but not for the Law of Homonymy the specific name *farciminoides* Ellis and Solander, 1786, as published in the binomen *Cellaria farciminoides*;

(d) to designate *Farcimia sinuosa* Hassall, 1840, type-species of *Cellaria* Ellis and Solander, 1786;

(e) to place on the Official List of Generic Names in Zoology: *Cellaria* Ellis and Solander, 1786 (gender: feminine), type-species by designation under the plenary powers in 3(d) above, *Farcimia sinuosa* Hassall, 1840;

(4) [*fistulosa* and *sinuosa* adopted]

(a) to designate a neotype of *Eschara fistulosa* Linnaeus, 1758, as indicated in 11. above (p. 347, footnote), in accordance with current usage;

(b) to designate a neotype of *Cellularia salicornia* Pallas, 1766, as indicated in 11. above (p. 347, footnote), in accordance with the proposal of Harmer (1923) to restrict the specific name *salicornia* Pallas, 1766, to section (β) of his species;

(c) to suppress for the purposes of the Law of Priority but not for the Law of Homonymy the specific name *farciminoides* Ellis and Solander, 1786, as published in the binomen *Cellaria farciminoides*;

(d) to designate *Farcimia sinuosa* Hassall, 1840, type-species of *Cellaria* Ellis and Solander, 1786;

(e) to place on the Official List of Generic Names in Zoology: *Cellaria* Ellis and Solander, 1786 (gender: feminine), type-species by designation under the plenary powers in (4)(d) above, *Farcimia sinuosa* Hassall, 1840.

And the International Commission is also requested:

(5) to suppress for the purposes of the Law of Priority but not for the Law of Homonymy the specific name *salicornioides* Lamouroux, 1816, as published in the binomen *Cellaria salicornioides*; or

(6) to designate a neotype of *Cellaria salicornioides* Lamouroux, as indicated in 15. above (p. 349, footnote).

18. I should like to thank Dr. Anna B. Hastings and Miss Patricia L. Cook for their helpful comments on the draft of this paper.

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ELIPESURUS SCHOMBURGK, 1843 (PISCES): PROPOSED SUPPRESSION UNDER THE PLENARY POWERS. Z.N.(S.) 1825

By Mariano N. Castex, S. J. (*Colegio maximo de San José, San Miguel, (E.G.S.M.), Argentina*)

The genus *Elipesurus* Schomburgk, 1843 was established on a single species *Elipesurus spinicauda* Schomburgk, 1843, based on a figure in Schomburgk. This species therefore becomes the type-species by monotypy. The identity of the species has remained uncertain ever since.

2. In 1865 Dumeril redescribed the generic taxon under the name *Paratrygon* based again on a single nomen dubium, *Raja ajeriba* Walbaum, 1792 which is the type-species by monotypy.

3. In 1878 Garman established the generic name *Potamotrygon* for the same taxon with three species, *P. humboldti* (with *Trygon hystrix* Müller & Henle, 1841, in synonymy), *P. motoro* Müller & Henle, 1841, and *P. dumerilii* Castelnau 1855. He did not fix a type-species but Fowler cited *Trygon hystrix* Müller & Henle as the type in 1948. At the same time Garman established the family-group POTAMOTRYGONES in the TRYGONIDAE. Garman stated that *Elipesurus* (sic) *spinicauda* Schomburgk was probably a mutilated specimen of one of the varieties of *Potamotrygon dumerilii* Castelnau, 1855. There is no doubt that Garman used a new name *Potamotrygon* and ignored the available name *Paratrygon* Dumeril, 1865 because the latter was based on the nomen dubium *Raja ajereba* Walbaum.

4. In 1870 Günther emended the name *Elipesurus* to *Ellipesurus* and was followed by Ribeiro 1907 who placed the genus with *Dasyatis* Rafinesque, 1810 in the family DASYATIDAE.

5. In 1913 Garman changed his mind and adopted the name *Elipesurus* Schomburgk for *E. spinicauda* Schomburgk, with the words:

> " Though it is a doubtful species, it is one that, like *Elipesurus strogylopterus*, collectors may yet hope to secure."

Garman doubtfully included *Trygon strogylopterus* Schomburgk, 1843 in the genus *Elipesurus* and raised his *Potamotrygones* to family rank, POTAMOTRYGONIDAE on page 415.

6. In 1948 Fowler adopted the name *Elipesurus* Schomburgk with type-species *E. spinicauda* Schomburgk for *Trygon strogylopterus* Schomburgk. *Elipesurus* Schomburgk cannot, therefore, be regarded as a nomen oblitum under Article 23b until 1998, even if it remains unused during that time (see Paragraph 4). Fowler rejected Garman's name *Potamotrygon* for the generic taxon and used the older name *Paratrygon* Dumeril, 1865. Since the type-species of *Paratrygon* by monotypy is *Raja ajereba* Walbaum and since this species is unidentifiable, Garman was probably right in regarding *Paratrygon* Dumeril as a nomen dubium and refusing to use it. Fowler also created the

family group name PARATRYGONIDAE which he used instead of Garman's POTAMOTRYGONIDAE. This also is a nomen dubium and should not be used at present*.

7. The present author in 1964 in a revision of the POTAMOTRYGONIDAE adopted the name *Elipesurus* for the doubtful *E. Spinicauda* but rejected Fowler's PARATRYGONIDAE and PARATRYGONINAE Gill cited by Fowler, and used Garman's name POTAMOTRYGONIDAE and his genus *Potamotrygon* with type-species *Trygon hystrix* Müller & Henle, 1841. He included 17 species in the genus *Potamotrygon*. Having carefully studied Schomburgk's figure and compared it with some 5,000 specimens, he has now come to the conclusion that Schomburgk had *Trygon brachyurus* Günther 1870 before him when figuring *Elipesurus spinicauda*. *Elipesurus* thus becomes a senior synonym of *Potamotrygon* Garman and by the law of priority should replace it.

8. In order to maintain uniformity and to avoid confusion, the International Commission on Zoological Nomenclature is requested to:

(1) use its plenary powers to suppress for the purposes of the Law of Priority but not for those of the Law of Homonymy:
  (a) the generic name *Elipesurus* Schomburgk, 1843;
  (b) the specific name *spinicauda* Schomburgk, 1843, as published in the binomen *Elipesurus spinicauda*;

(2) place the generic name *Potamotrygon* Garman, 1878 (gender: neuter), type-species, by designation by Fowler, 1948, *Trygon hystrix* Müller & Henle, 1841, on the Official List of Generic Names in Zoology;

(3) place the specific name *hystrix* Müller & Henle, 1841, as published in the binomen *Trygon hystrix* (type-species of *Potamotrygon* Garman, 1878) on the Official List of Specific Names in Zoology;

(4) place the following generic names on the Official Index of Rejected and Invalid Generic Names in Zoology:
  (a) *Elipesurus* Schomburgk, 1843 (as suppressed under the plenary powers in (1) above);
  (b) *Ellipesurus* Günther, 1870 (an unjustified emendation of *Elipesurus* Schomburgk, 1843);

(5) place the specific name *spinicauda* Schomburgk, 1843, as published in the binomen *Elipesurus spinicauda* (as suppressed under the plenary powers in (1) above) on the Official Index of Rejected and Invalid Specific Names in Zoology;

(6) place the family name POTAMOTRYGONIDAE Garman, 1878 (type-genus *Potamotrygon* Garman, 1878) on the Official List of Family-Group Names in Zoology.

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*It is unwise to suppress nomina dubia under the plenary powers of the International Commission since such names do not threaten any current name. If and when they are identified then it is time enough for the zoologist who identifies the species to apply for its suppression if it threatens some well used name. See *Bull. zool. Nomenclature* **22** : 265, 1965.

W. E. China.

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SOLENIUS LEPELETIER & BRULLÉ, 1834 (INSECTA, HYMENOPTERA): PROPOSED DESIGNATION OF A TYPE-SPECIES UNDER THE PLENARY POWERS.* Z.N.(S.) 1827

By H. K. Court and A. S. Menke (*University of California, Davis, California, U.S.A.*)

The generic name *Solenius* Lepeletier & Brullé, 1834, has been regarded as a subgenus of the crabronine genus *Lestica* for about 30 years. However, unless the Commission suppresses the first valid designation of type-species (that of Westwood, 1839), *Solenius* must be synonymized with the genus *Mellinus* Fabricius, 1790.

2. Lepeletier & Brullé (1834) described the genus *Solenius*, but did not designate a type-species. Twelve species were included, among them *Solenius interruptus* Lepeletier & Brullé, 1834 (now placed in the genus *Lestica* Billberg, 1820) and *S. vagus* (Linnaeus, 1758). Linnaeus' *vagus* was misidentified as a crabronid by all workers until 1935 when Richards' examination of the holotype proved that it really was a species of the nyssonine genus *Mellinus*. The taxon that has masqueraded under the name " *vagus* " for so many years is now recognized as a species of the crabronine genus *Ectemnius* (that is, *E. continuus* Fabricius, 1804) (see Richards, 1935). In the 1800's and early 1900's the treatment of the crabronines was very conservative, with nearly all species being placed in *Crabro*. *Ectemnius* was considered a synonym of *Solenius*, the latter recognized as a subgenus of *Crabro*. This interpretation was followed by most Europeans until Pate (1937) published his catalog of genera.

3. Westwood (1839) cited *Sphex vaga* Linnaeus as an example of *Solenius*. This was considered as a designation of type-species by workers of the 1800's and early 1900's. By Direction 32 (1956), Westwood's paper was placed on the Official List of Works. This Direction also stated that " the species specified against the names of the genera there enumerated are to be treated as having been selected to be the type-species of those genera ".

4. If Westwood's designation is accepted then *Solenius* is isogenotypic with *Mellinus* Fabricius, 1790, and becomes a junior synonym of the latter (see Richards, 1935). This would leave the subgenus of *Lestica* currently called " *Solenius* " without a name.

5. A second type designation for *Solenius* was made by Ashmead (1899). He selected *Solenius interruptus* Lepeletier & Brullé as type-species of *Solenius*. This is the designation which Pate (1937) accepted in his catalog of the sphecid genera and their type-species. Pate rejected Westwood's type designation on the grounds that Westwood had specifically stated that he was only listing an example of each genus. Ashmead's designation transferred *Solenius* to the genus *Lestica* where it is now recognized as a subgenus. The next available name for the genus containing *continuus* Fabricius was *Ectemnius* Dahlbom, 1845. Subsequent to Ashmead's designation American authors tended to

* A product of research supported by National Science Foundation grant ≠ GB-5839

accept it while most Europeans continued to use *Solenius* in the sense of Westwood. Since Pate's work, however, nearly everyone has used *Solenius* in the sense of Ashmead and a large literature has built up around *Ectemnius* and *Lestica*, subgenus *Solenius*.

6. Benson, Ferrière, and Richards (1947) who disagreed with or ignored Pate (1937), tried to have Westwood's designation suppressed on the valid grounds that Westwood had misidentified *vagus* (as had his contemporaries). Benson *et al.*, proposed that *Crabro continuus* Fabricius be designated as the type of *Solenius*. Such action would have retained *Solenius* for those wasps with which it had been associated up to 1937, (see Pate, 1937), but the Commission (1950) postponed consideration of the petition pending further information.

7. In spite of Pate's arguments for accepting Ashmead's type designation, Westwood's still has priority according to the Code. Therefore in order to maintain current worldwide popular usage of *Solenius*, Westwood's type designation must be suppressed. The International Commission on Zoological Nomenclature is therefore requested:

(1) to use its plenary powers to set aside all designations of type-species made prior to the Ruling now requested for the genus *Solenius* Lepeletier & Brullé, 1834, and having done so to designate *Solenius interruptus* Lepeletier & Brullé, 1834, to be the type-species of that genus;

(2) to place the generic name *Solenius* Lepeletier & Brullé, 1834 (gender : masculine), type-species, by designation under the plenary powers in (1) above, *Solenius interruptus* Lepeletier & Brullé, 1834, on the Official List of Generic Names in Zoology;

(3) to place the specific name *interruptus* Lepeletier & Brullé, 1834, as published in the binomen *Solenius interruptus* (type-species of *Solenius* Lepeletier & Brullé, 1834) on the Official List of Specific Names in Zoology.

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LIPHISTIUS SCHIØDTE, 1849 (ARANEAE): PROPOSED VALIDATION UNDER THE PLENARY POWERS. Z.N.(S.) 1828

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The purpose of the present application is to ask the International Commission on Zoological Nomenclature to use its plenary powers to validate the emendation to *Liphistius* of the generic name *Lipistius* Schiødte, 1849, and to place the emended name on the Official List of Generic Names in Zoology and the family name LIPHISTIIDAE Thorell, 1869, on the Official List of Family-Group Names in Zoology.

2. The name *Lipistius* Schiødte, 1849 (*Nat. Tidskr.* (2) **2** : 621) with the type-species *L. desultor* by monotypy was first emended by Thorell in 1869, *On European Spiders* : 13, to *Liphistius*. Since that time, 1869, the name has been spelled consistently *Liphistius* in the zoological literature, the only exception being the catalogs of generic names of Marschall, 1873, Scudder, 1882, and Neave, 1939 (see Bonnett, 1957, *Bibliographia Araneorum* **2** : 2548–2549; . . . . " dès 1869, Thorell p. 13 en donnant l'étymologie de ce terme, l'a corrigé en *Liphistius*; tous les auteurs l'ont ainsi employé par la suite ").

3. The catalog of C. F. Roewer, 1942, *Katalog der Araneae* **1** : 145, like previous catalogs spelled the genus *Lipistius*. Now after almost 100 years, one widely used European textbook and at least one taxonomic publication have followed the spelling of Roewer's Katalog.

4. The name *Liphistius* is the basis for the name of the family LIPHISTIIDAE [LIPHISTOIDAE, Thorell, 1869, *On European Spiders* : 43] and the basis of the name of one of the three suborders of spiders Liphistiomorphae Petrunkevitch, 1923, *Ann. New York Acad. Sci.* **29** : 167 [=Mesothelae Pocock, 1892, *Ann. Mag. nat. Hist.* (6) **10** : 314], a name still used by some authors. The name *Liphistius* and that of the higher taxa based on it is cited in many textbooks and other publications as an example of a primitive spider whose abdomen is segmented.

5. The International Commission is therefore requested:

(1) to use its plenary powers to validate the emendation to *Liphistius* of the generic name *Lipistius* Schiødte, 1849;

(2) to place the generic name *Liphistius* Schiødte, 1849 (gender : masculine), type-species, by monotypy, *Lipistius* [sic] *desultor* Schiødte, 1849, on the Official List of Generic Names in Zoology;

(3) to place the specific name *desultor* Schiødte, 1849, as published in the binomen *Lipistius desultor* (type-species of *Liphistius* Schiødte, 1849) on the Official List of Specific Names in Zoology;

(4) to place the family name LIPHISTIIDAE Thorell, 1869 (type-genus *Liphistius* Schiødte, 1849) on the Official List of Family-Group Names in Zoology;

(5) to place the generic name *Lipistius* Schiødte, 1849 (Ruled under the plenary powers in (1) above to be an incorrect original spelling for *Liphistius*) on the Official Index of Rejected and Invalid Generic Names in Zoology.

BOLLIA JONES AND HOLL, 1886 (OSTRACODA): DESIGNATION OF A TYPE-SPECIES UNDER THE PLENARY POWERS. Z.N.(S.) 1831

By Albert L. Guber (*The Pennsylvania State University, University Park, Pa., U.S.A.*)

I. Introduction. Jones and Holl (1886) erected the new genus *Bollia* and included in it two new species, *B. bicollina* and *B. uniflexa*. They based the species *B. bicollina* on three figured specimens as well as other unfigured material. Additional specimens of this species have been found in abundance by the author as well as by other workers. *B. uniflexa* was based on a single figured specimen. No other specimens of this species were found by Jones and Holl or by any subsequent workers.

Jones and Holl did not select a type-species for the genus *Bollia*. Miller (1892) subsequently designated *Bollia uniflexa* as the type-species for *Bollia*.

II. Origin and nature of the problem. In 1963 the author visited the British Museum (Natural History) and re-examined the figured specimens of *B. bicollina* and *B. uniflexa*. It was immediately apparent that *B. uniflexa* is not a drepanellacean ostracode, as it is presently classified, but that it is a member of the Beyrichiacea, a superfamily characterized by a unique type of shell dimorphism.

It was also noted that of the 69 different species that have been assigned to *Bollia*, most of them favourably agree with the figured specimens of *B. bicollina*, but none agree with the type-species, *B. uniflexa*.

Bollia is large in number of species contained in the genus. It is rather common in the appropriate temporal interval (Early and Middle Palaeozoic), and a concept of the genus is thoroughly ingrained in the paleontological literature. Unfortunately, the past and present concept of the genus is not based on the type-species, *B. uniflexa*, but it is based on the species *B. bicollina*. As *B. uniflexa* is now known to be a beyrichiacean ostracode it must be transferred out of the superfamily Drepanellacea. The common concept of the genus, however, is conveyed by *B. bicollina*, which, with all the other present species of *Bollia*, will remain in the superfamily Drepanellacea. The possible solutions to this problem, therefore, would be to transfer *Bollia* to the Beyrichiacea with *B. uniflexa* as the type-species or to suppress *B. uniflexa* as the type-species, designate *B. bicollina* as the type-species, and retain *Bollia* in the Drepanellacea.

III. Consequences of transferring Bollia *to the Beyrichiacea while retaining* B. uniflexa *as the type-species.* If *B. uniflexa* is not suppressed as the type-species for *Bollia*, then *Bollia* would have to be removed from the superfamily Drepanellacea and transferred to the superfamily Beyrichiacea. The consequences of such a transfer would be as follows:

(1) Such a transfer would affect drepanellacean systematics in the following manner:

The present classification (Scott, 1961) of drepanellacean ostracodes is as follows:

Superfamily Drepanellacea Ulrich & Bassler, 1923
Family Drepanellidae Ulrich & Bassler, 1923
Family Aechminellidae Sohn, 1961
Family Aechminidae Bouček, 1936
Family Bolliidae Bouček, 1936
Family Kirkbyellidae Sohn, 1961
Family Richinidae Scott, 1961

The transfer of *Bollia* to the Beyrichiacea would necessitate that the subfamily Ulrichiinae Schmidt, 1941 be translated to family status to replace the family name Bolliidae and that all nominal species of *Bollia*, except *B. uniflexa*, be assigned to a new genus.

(2) Such a transfer would affect beyrichiacean systematics in the following manner:

The present classification (Martinsson, 1963) of beyrichiacean ostracodes is as follows:

Superfamily Beyrichiacea Matthew, 1886
Family Craspedobolbinidae Martinsson, 1962
Subfamily Craspedobolbininae Martinsson, 1962
Subfamily Treposellinae Henningsmoen, 1954
Subfamily Amphitoxotidinae Martinsson, 1962
Family Beyrichiidae Matthew, 1886
Subfamily Beyrichiinae Matthew, 1886
Subfamily Zygobolbininae Ulrich & Bassler, 1923
Subfamily Kloedeniinae Ulrich & Bassler, 1923
Subfamily Hexophthalmoidinae Martinsson, 1962

Great taxonomic importance is placed on the structure of the female brood pouch in classifying beyrichiacean ostracodes. The type and only known specimen of *B. uniflexa* is a male of the species and considerable uncertainty exists as to where amongst the forementioned beyrichiacean subfamilies it should be placed. The specimen of *B. uniflexa* possesses some of the characters of the amphitoxotidines and of the treposellines, as well as characters unique to this species. The transfer of *Bollia*, therefore, to the Beyrichiacea could result in one of the following systems:

(a) Transfer of *Bollia* to the subfamily Treposellinae. In which case, in accordance with the Law of Priority, the Treposellinae Henningsmoen, 1954 would become a junior synonym of the Bolliinae Bouček, 1936 and the Craspedobolbinidae Martinsson, 1962 would become a junior synonym of the Bolliidae Bouček, 1936.

(b) Transfer of *Bollia* to the subfamily Amphitoxotidinae. In which case, in accordance with the Law of Priority, the Amphitoxotidinae Martinsson, 1962 would become a junior synonym of the Bolliinae Bouček, 1936 and the Craspedobolbinidae Martinsson, 1962 would become a junior synonym of the Bolliidae Bouček, 1936.

(c) Transfer of *Bollia* to a new subfamily in the family Craspedobolbinidae.

In which case, in accordance with the Law of Priority, the Craspedobolbinidae Martinsson, 1962 would become a junior synonym of the Bolliidae Bouček, 1936 and this family would accommodate the new subfamily Bolliinae Bouček, 1936.

(d) Transfer of *Bollia* to a new family within the Beyrichiacea.

In which case the new beyrichiacean family Bolliidae Bouček, 1936 would, because of the nature of the type-specimen of the type-species, remain in a monotypic family.

In order to promote a stable nomenclature and in order not to disrupt the past and present concept of the genus *Bollia*, none of the above transfers are deemed desirable. Not only will the systematics of the Drepanellacea be disrupted, but the systematics of the Beyrichiacea can never be stabilized until a female specimen of *B. uniflexa* is found. No such specimen exists in the original collections of Jones and Holl. The author has extensively sampled the same temporal interval and has not recovered a single specimen of *B. uniflexa* among the thousands of ostracodes found. Both Dr. Anders Martinsson of Uppsala, Sweden and Dr. Eric Robinson of London, England have likewise sampled the critical interval and neither has found a specimen of *B. uniflexa*.

IV. Consequences of suppressing Bollia uniflexa *as type-species for* Bollia *and designating* Bollia bicollina *as type-species for* Bollia. In view of the undesirable aspects of transferring *Bollia* from the Drepanellacea to the Beyrichiacea, the consequences of suppressing *B. uniflexa* as type-species and designating *B. bicollina* as type-species should be considered.

These consequences are as follows:

(1) A stable nomenclature will ensue because no changes in the systematics of the Drepanellacea will be necessary. *B. uniflexa* can tentatively be assigned to an existing or new beyrichiacean genus. This genus can likewise be provisionally assigned to an existing subfamily pending discovery of a female specimen.

(2) The preservation of the past and present concept of the genus *Bollia* will result because the common concept of *Bollia* is best conveyed in the species *B. bicollina*. Although type localities were not designated for either *B. uniflexa* or *B. bicollina*, specimens conspecific with *B. bicollina* can easily be collected for study.

V. Recommendations. The following recommendations are therefore made, that the International Commission should:

(1) use its plenary powers to set aside all designations of type-species for the nominal genus *Bollia* Jones and Holl, 1886, and having done so, designate *Bollia bicollina* Jones and Holl, 1886, to be the type-species for that genus;

(2) place the following generic name on the Official List of Generic Names in Zoology: *Bollia* Jones and Holl, 1886, (gender : feminine) type-species by designation under the plenary powers in 1. above, *Bollia bicollina* Jones and Holl, 1886;

(3) place the following specific name on the Official List of Specific Names in Zoology: *bicollina* Jones and Holl, 1886, as published in the binomen *Bollia bicollina* (type-species of *Bollia* Jones and Holl, 1886);

(4) place the family-name BOLLIIDAE Bouček, 1938 (type-genus *Bollia* Jones and Holl, 1886) on the Official List of Family-Group Names in Zoology.

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CORRIGENDA

page 10. Para. (2) (a), line 2 : substitute " 1831 " for " 1830 "

page 26. First line : substitute " *Acamarchis* Lamouroux, 1816, *Hist. Polyp. coral. flex.* : 132 " for " *Bugulina* Gray, 1848, *List of British Animals*, Pt. I : 114 "

page 31. Para. 2 : insert " and 1 (b) " after " 1 (a) "

page 46. Para. (4), first line : substitute " Indexes " for " Lists "

page 66. Line 19 : substitute " chimpanzee " for " champanzee "

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